NIVERSITY OF UDAIPUR

UDAIPUR



ANNUAL REPORT

1968-69

CONTENTS

PART I

PART II

Reports from the Colleges and Schools

PART III

Reports from Departments

PART IV

PART V

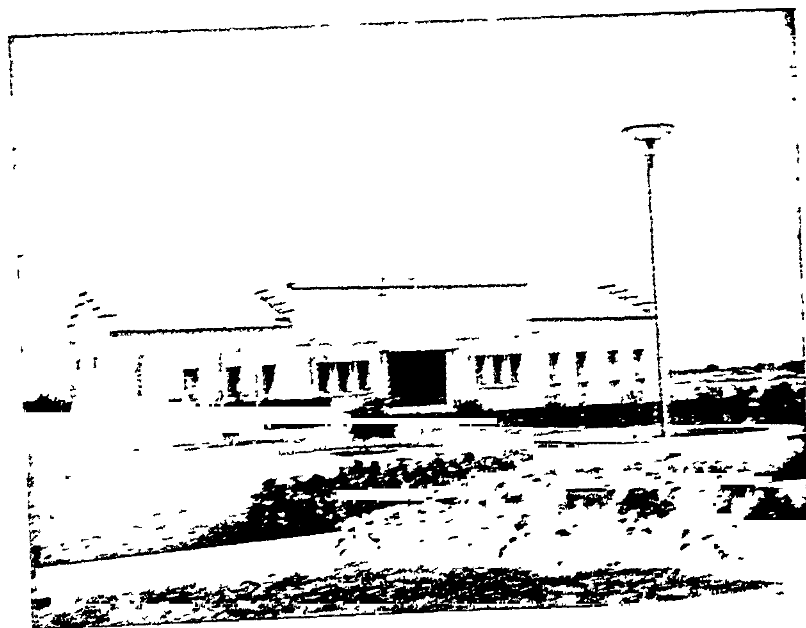
Appendices



Convocation Procession



An Experiment on Sorghum at Vallabhnagar



A Field Laboratory for Plant Diseases

ANNUAL REPORT

(1st July, 1968 to 30th June, 1969)

INTRODUCTORY REMARKS BY THE VICE-CHANCELLOR

In this the Seventh Annual Report of the Udaipur University, covering the period from 1st July, 1968 to 30th June of 1969, these remarks refer, as usual, to only some of the main features of development

I THE PROFILE OF THE UNIVERSITY

As of to-day we have eight faculties (medicine not included) and a complex of Constituent Colleges of an Agricultural University of the land grant pattern plus six associated (affiliated) colleges These are

Constituent Institutions

1 Agricultural College (Jobner Campus)
2 Agricultural College (Udaipur Campus)
3 College of Veterinary & Animal Sciences (Bikaner)
4 College of Home Science (yet in association with Agr College, Udaipur)
5 College of Technology & Agricultural Engineering (Udaipur)
6 The School of Basic Sciences and Humanities (Maharana Bhupal College), Udaipur
7 The Law School (yet in association with the M B College)

Associated Institutions

8 Bhupal Nobles' College (Udaipur)
9 Meera Girls' College (Udaipur)
10 Vidya Bhawan Teachers' Training College (Udaipur)
11 Tilak Teachers' College (Dabok Udaipur)
12 Udaipur School of Social Work (Udaipur)
13 Shramjeevi College (Udaipur)
14 Vidya Bhawan Rural Institute (Udaipur)

It will be seen that the University has its presence in three of the five agro-climatic regions of Rajasthan The remaining two will be covered after the complete transfer of research by the State Govt

The following two tables give information regarding the number of students and sources of income of the University:

I. STUDENTS

Faculty	YEAR 1966-67	1967-68	1968-69
Agriculture	1341	1268	931
Veterinary	246	271	283
Agri. Engg.	134	171	196
Arts	1704	2590	2850
Science	1279	1529	2179
Commerce	320	468	512
Education	436	512	501
Law	209	249	131
TOTAL	5669	7058	7583

II. INCOME FROM VARIOUS SOURCES

SOURCES	YEAR 1966-67	1967-68	1968-69
State Government	74,06,115.26	75,83,002.00	82,74,376.00
ICAR	8,81,550.00	17,53,257.00	26,38,052.00
UGC	4,53,216.14	6.19,360.00	5,35,414.00
CSIR	20,575.11	33,543.00	42.141.13
Other Central Sources	15,625.41	2,15,928.00	60,996.13
Fees etc.	11,04,030.00	14,87,809.00	16,27,710.00
TOTAL	98,81,111.92	116,92,899.00	131,78,687.26

2. THE INTER-INSTITUTIONAL PROGRAMME

Under this, assistance is received in three ways:

(1) Providing technicians from the Ohio State University to strengthen the departments. In regard to this, we had so far 23 consultants including the present team of five.

(2) Enabling Indian participants to go to Ohio State University for specialized training in fields where need exists In this connection we have had a total of 84 participants (including the batch that left last month)

(3) Provision of books and equipment not readily available in India In this regard we gratefully record that through US/AID we have so far received books and equipment worth 3,58,000 US dollars

In addition to the above we owe it to the US/AID that two seminars could be arranged of the 'returned participants' in which views were exchanged and discussions led to valuable suggestions for improvement

We are also grateful to the AID for financial help under some thirty 'Rupee projects"

An Agricultural University of the Land-Grant type, must be service oriented The service to the State Agriculture require (a) resident instruction and the graduate and post-graduate levels to enrolled students, (b) the conduct of research, basic and applied in agriculture and related fields to make the results of technical knowledge and advances available to all citizens

3 EXTENSION

The off-campus activities of the Extension Directorate of the University made rapid progress and has established close rapport with farmers These activities fall under the heads of—

(a) Refresher Courses

Nine courses of 5 to 45 days each were organised for some 258 officers

Twenty-eight courses of institutional training were held for a period of 7 to 23 days each, reaching 1072 farmers

(b) Farmers' Training

Some 4271 farmers and farm women were trained in 147 one day Camps

Forty two discussion groups चर्चा मंडल have been started in villages with the participation of 1007 farm men and farm women

(c) Farm Advisory Service

Under this, advice was given to farmers through demonstrations, in vegetable and fruit growing, poultry keeping, plant protection methods etc.

(d) The Communication Centre

Brings out bulletins, leaflets and literature for farmers. It has also radio programming with the cooperation of AIR.

The monthly अपना पत्र in Hindi has made a good impact.

(e) Youth Clubs

With the advice of Dr. Best youth club movement has made considerable headway. The number of youth clubs has risen from 36 to 418. Members take up (as in 4-H clubs) projects regarding crop, vegetable, fruit, poultry, calf and goat.

(f) The Exhibition Unit

Some sixteen exhibition were shown which drew an attendance of a total of 40,000 farmers and others.

4. RESEARCH

At Vallabhnagar, during the year under report, additional 75 acres of land were *rough*-levelled bringing the total to 175. In addition, an area of 27 acres has been *precision*-levelled bringing its total to 52 acres of fairly complete development. Three wells were further deepened and fitted with pumping sets.

There are yet a few pockets (of some 96 bighas) which need to be acquisitioned.

At Asalpur, too, (near Jobner) 25 acres have been levelled with our limited resources.

5. COLLEGE OF AGRICULTURE

(a) Udaipur Campus

Here we have 225 acres of land with adequate buildings and three farms of Agronomy, Animal Husbandry and Poultry.

The number of undergraduates was 646 and that of the post-graduate students 77.

The pilot mik scheme attached to this campus is planned for educational purposes and for training in Dairy Technology Not being Commercial, the scheme naturally *involves some loss every year* But with the availability of State funds, purchase of vehicles and equipment and increased procurement of milk from villages the annual loss is getting reduced

(b) Jobner Campus

The number of undergraduates was 488 As regards postgraduate teaching, there is an arrangement of integration between Jobner and Udaipur Under this the 77 students referred to as at Udaipur, necessarily spend at least a semester at Jobner Thus all post-graduate students get acquainted with the different agro-climatic conditions and the staff at both campuses get involved in post graduate instruction

Ph D work is done at both centres

The results at both campuses are very good and our students get preference over others in regard to admission to post graduate classes *outside and to business firms*

There are welcome signs showing that agricultural graduates are now turning to land

6 VETERINARY AND ANIMAL SCIENCE (Bikaner)

During the year under report, the Ambulatory Clinic, under the guidance of Dr Barner and Dr I S Kolhi, has taken firm roots and the impact is felt in the neighbouring villages

At the Dairy farm of this College Rathi breed Cows are being crossed with foreign breed and the first generation is coming up in good condition In the next three years, the final products of the cross breed animals could be compared with the basic stock for evaluation

7 HOME SCIENCE

Started in 1966 with 22 girls and just one lecturer, the institution has emerged in its third year with 67 girls and five staff members with an Associated Dean at its head

An attractive hostel for girls has been built in the premises of the M B College The accommodation is shared by girls of both institutions

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8. THE COLLEGE OF TECHNOLOGY & AGRICULTURAL ENGINEERING (CTAE)

Three dates are significant during this year for this college.

On the 29th June, 1968 the College Office shifted to its new building on the campus.

On the 8th July, classes were held for the first time in this new building.

On the 27th March 1969, this new building was formally inaugurated by Dr. John P. Lewis, Minister-Director US/AID.

Dr. Drew, the advisor from OSU secured for the College Rs. 1.25 lac from the USAID.

The ICAR sanctioned at this College an instrument cell and has given Rs. 20,000 as the first instalment.

9. ASSOCIATED COLLEGES

It is true that the model Act for Agricultural Universities of the Land Grant pattern does not allow affiliated Colleges in the scheme. But the implication of the term 'affiliated' (associated) is different. In our case in India, the Delhi University has a number of affiliated colleges, even more than the number of Constituent Colleges. But our affiliated colleges are subject to all the rules and regulations of the University in respect of syllabus, admission of students, examinations, qualifications of teachers, their appointments and conditions of service. The minimum qualifications of teachers whether in constituent colleges or affiliated colleges are common. They are all appointed through selection committees and in the case of the affiliated colleges, the selection committee has one or two representatives of the University. The University has also its presence in the Governing Bodies of these colleges. The colleges have to submit annual returns and in the case of a dispute between a teacher and his college, there is a provision of appointing a tribunal by the University. The only difference between a constituent college and an affiliated college is in the management of the internal finance. And if the scales of teachers in affiliated colleges are somewhat lower than those in constituent colleges, they do not fall below a prescribed minimum. The University, in point of fact, has saved from the responsibility of managing the finances of its affiliated

colleges In my view, therefore, the exclusion of affiliated colleges is not called for

Further my information, subject to corrections, is that in Canada, Universities have on their campuses both constituent and affiliated colleges

It is worth noting that the examination results of the associated colleges and the tone of discipline compare well with those in the constituent colleges Qualified teachers from these are recognised for participation in post graduate teaching and research These Colleges have also a share, to some extent, in the governance of the University

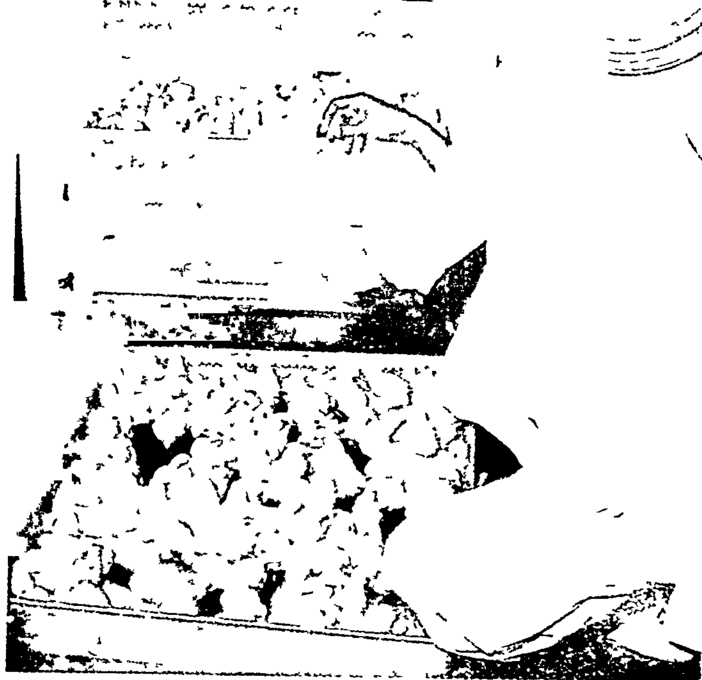
10 I have much pleasure in recording, before closing, our deep appreciation of the help, advice and, at times, guidance we received from Dr Gist, Dr Best and Dr Drew who joined us last year from the OSU

—*G. S. Mahajani*

Vice Chancellor with the farmers at the Maize Demonstration Farm



Students at work in the Foods a ry



Rearing Chickens at the Poultry Farm, College of Agriculture, Udaipur

PART I

I GENERAL

The year (July 1, 1968 to June 30, 1969) under review was the 7th academic year of the working of the University During the year, the number of colleges and candidates appearing at various Examinations was as follows —

(i)	No of Associated Post-Graduate Colleges		3
(ii)	No of Associated Degree Colleges		4
(iii)	No of University Colleges		6
		Education	Agri
(iv)	No of candidates who appeared at the Post-Graduate Examinations	725	94
(v)	No of candidates who appeared at the Degree Examinations (and parts inclusive)	4842	416
(vi)	No of candidates who appeared at the Pre-University examinations	589	332
(vii)	No of candidates who appeared at the Diploma/Certificate Course Examinations	73	—

II ADMINISTRATION

Besides the Statutory Authorities of the University such as the Board of Control, the Executive Committee, the Academic Council etc, the following were the principal Executive Officers during the period 1968 69

(i) Vice Chancellor

Dr G S Mahajani M A, Ph D (Cambridge)

(ii) Registrar

Shri R S Gupta M A (Agra)

(iii) Comptroller

Shri G S Simlote M A, LL B (Agra)

(iv) Estate Officer

Shri Chandra Bhusan Sharma, A.M.I.E., who was on deputation from the State Government since 25th January, 1965 continued to hold the post as his period of deputation was further extended upto 30th June, 1969.

(v) Dean of Student Welfare

Dr. K. L. Sharma, M.A., Ph.D. (Agra).

(vi) Deans	*Colleges*
(a) Dr. N. Prasad, M.Sc., Ph.D. (Alld.)	Rajasthan College of Agriculture, Udaipur.
(b) Dr. Mohan Singh, GBVC, M.S., Ph.D. (Michi).	College of Vety. & Ani-Science, Bikaner.
(c) Dr. K. N. Nag, B.Sc. (Ag.) Engg. M.Sc., Ph.D. (Ohio,USA)	College of Tech. & Agril. Engineering, Udaipur.

(vii) Associate Deans

(a) Dr. R. M. Singh, M.Sc. (Ag.), Ph.D. (Agra).	S. K. N. College of Agri. Jobner.
(b) Dr. (Mrs.) Leela Phadnis B.Sc., B.Ed., Dip. in Home Science, M.S. (Nebraska U.S.A.)	College of Home Science.

(viii) Director, School of Basic Sciences and Humanities, Udaipur

Shri Bhim Sen, M.A. (Delhi).

(ix) Director of Agricultural Experiment Station, Udaipur

Dr. B. K. Srivastava, M.Sc. (Ag.), Ph.D. (Kansas).

(x) Director of Extension Education, Udaipur

Dr. D. K. Misra, M.Sc. (Ag)., Ph.D. (Kansas)
Assoc. IARI, M.S.

(xi) Dean Post-Graduate Studies : (Part-Time)

Dr. G.V. Bakore, M.Sc. (Agra), Ph.D. (Raj.) up to 31st March, 1969.

Dr. H.N. Mehrotra, M.Sc. (Ag.) Alld., Ph.D. (Illinois) from 1st April, 1969.

III CHAIRMEN OF FACULTIES

1 Faculty of Arts & Social Sciences

Dr K L Sharma, M A (Agra) upto 18 12-1968

Dr P T Thomas, B A , Ph D From 18 12 1968

2 Faculty of Science

Dr H B Tiwari, M Sc , D Phil (Alld), Ph D (USA), D Sc (Alld)

3 Faculty of Commerce

Shri R K Agarwal, M Com (Agra) up to 2 9-1968

Dr N L Hingorani, M Com , Ph D (Raj) from 3 9-1968

4 Faculty of Agriculture

Dr R M Singh, M Sc Ag , Ph D (Agra)

5 Faculty of Vety & Animal Science

Dr P N Mehrotra, B V Sc and A H (Agra), M R O V S. (London), M S (Ohio), Ph D (Udaipur)

6 Faculty of Ag Engg & Technology

Dr K N Nag, B Sc (Ag) (Alld), M Sc , Ph D (Ohio)

7 Faculty of Law

Shri N L Bhattacharya, B A (Agra) LL B (Cal)

8 Faculty of Education

Dr S N Mukerji, M A (Nag), M Ed (Col), T D (London), High Dip Ed (Dub), Dip Ed Adnen (Col), Ph.D (Col)

(xiii) Librarian

Vacant

(Dr B K Srivastava worked as Officer-in-Charge Library)

(xii) Officers other than those categorised under section 9 (c) of the Udaipur University Act (1962)

(a) Dy Librarian

Shri V B Nanda, B Sc , M A (Raj) Dip Lib Sc (T)

(*b*) *Dy. Registrar*

Shri G. S. Sharma, B.A.

(*c*) *Asst. Registrar*

Shri Goti Lal, B.A.
Shri Phool Shanker, B.A.
Shri L. K. Vyas, M.A.
Shri C. S. Mogra, M.A.
Shri H. S. L. Gupta, B.A., LL.B.

IV. POSTINGS & TRANSFERS

Appointments and transfers effected during the period are given in Appendix ('A' & A 1).

V. MEETINGS

The Executive Committee and the Academic Council had 5 and 3 meetings respectively during the period. The Council of Deans met four times. Post-Graduate Council and Finance Committee had 2 meetings each; Research and Extension Advisory Committees each had one meetings: Equivalence Committee & Library Committee each met once during the period.

The Faculties of Arts and Social Sciences, Science, Commerce, Law, and Education had one meeting each.

The Committees of Courses in various subjects had one meeting each except the Committees of the Faculties of Agriculture and Agricultural Engineering where no meetings were held.

VI. IMPORTANT DECISIONS

A. Administrative Decisions :

1. It was decided that the new Scales of pay for teachers of the Agricultural Wing in Teaching, Research and Extension be introduced in the light of the communication received from the State Government and the I.C.A.R.

2. It was decided that the revised grade Rs. 200-500 be not allowed to those Agricultural and Laboratory Assistants in Agricultural Colleges

who resigned or left their posts after 1-4-1965, the date from which the new pay scale come into force

3 Grades of the following posts were revised with effect from July, 1969

1 Registrar 1000 50-1500

2 Dy Registrar 700-40-1100

3 Asstt Registrar 400 30 640-40 800

4 Existing Associate Readers 550-40-750-50-1000 (dying cadre)

4 It was decided to make the rationalised pay scales to non teaching staff of the University effective from 1-3-1965

5 It was decided that

(i) The Lab Assistant drawing pay in pay scale 200-102-50-15-325 20-425 EB 25 500 would always draw more than the subordinate official drawing pay in 180-340 having higher rate of increments

(ii) Laboratory Technicians, Laboratory Assistants and Agricultural Assistants having B Sc (Ag) degree be placed in the pay scale of Rs 200-10 250 15-325-20-425-EB 25 500

(iii) Farm Managers possessing B Sc (Ag) qualifications will get the same pay scale i e , Rs 200-10 250-15 325-20-425-EB-25-500

(iv) Farm Manager who are M Sc (Ag) will be given an initial start of Rs 250/- in the pay scale of Rs 200-10 350 15-325-20-425 EB 25 500

(v) These pay scales will come into force w e f 1-4-1966, i e the date on which rationalised pay scales were introduced in the University

(vi) Government grades will carry D A at Government rates and in such cases, D A at University rates shall be discontinued forthwith and that in cases D A at University rates have been given recovery of over-payment made in part be waived

provided these are routed through the Head of the Department Postage expenses by surface mail only will be allowed The difference between surface mail and air mail will be met out by the candidate, if he wants them to be despatched by air mail

13 It was decided that existing employees of the University both I D Ds and B Sc (Ag) be allowed revised pay scale i e Rs 200-10-250-15-325 20 425 EB 35-500

14 It was decided that except for those who are under the USAID Programme no one else is to be treated as a sponsored candidate, irrespective of what was done in the past

15 Temporary employees of the Pilot Milk Supply Scheme who have been in continuous University Service for one year or more be granted confirmation co terminus with the life of the Scheme

16 U S A I D Participants under Joint Programme undergoing training at I A R I or any other institution in India be paid either half salary or full salary minus their scholarship awarded by I C A R whichever is higher, provided that if a participant joins I A R I under a degree joint programme and spends at I A R I first six months of programme, he shall be allowed full pay for this period of six months and half pay for the rest of the programme at I A R I and in USA

Regarding the terms to be granted to officers sent abroad for training for a period over six months —

(a) The deputation terms be, as a rule, allowed in cases where the University employees are sponsored by the University for the proposed training and the persons selected by the screening committee shall only be treated as having been sponsored by the University

(b) Where the initiative comes from the University employee himself who may apply for training or educational course, he will not be treated as sponsored by University, even though the application for selection might have been forwarded by the University In such cases only study leave will be allowed

17. The following facilities were extended from May 16, 1967 to the participants under USAID Programme, Graduate Assistants, and other teachers on half pay leave :

(a) Dearness Allowance on half pay.

(b) House rent allowance on full pay.

(c) Medical reimbursement as per rules.

18. Temporary employees after remained three years in the University be allowed the benefit of University contributory Provident Fund.

19. Permanent employees of the University who avail of extra-ordinary leave for higher studies be allowed to earn grade increments for the period of their extra-ordinary leave, as is the practice in the State Service.

20. The following standing sub-committee was appointed to examine the proposals or grievances of the teaching staff:—

Vice-Chancellor	Chairman
Dr. K.C. Khanna	Dy. Chairman
Mr. R.S. Kapur	
Dr. Mohan Singh	
Dr. R.S. Rawat	
Mr. M.L. Agarwal	
Registrar	Secretary

21. The following were nominated to serve on the Governing Bodies of the Associated Colleges:—

B.N. College, Udaipur	Shri Bhim Sen Dr. K.S. Kushwaha
G.S.V.B. Teacher's College, Udaipur Vidya Bhawan Rural Institute Udaipur	Shri S.S. Saxena Dr. B.K. Tandon
Shramjeevi College, Udaipur School of Social Work, Udaipur Lokmanya Tilak Teachers' College, (Dabok) Udaipur.	Shri Bhim Sen Dr. D.K. Misra

22 It was decided that all Plan posts be deemed as permanent for purpose of confirmation except "Scheme & tenure Posts"

23 The executive Committee decided that if a father is invalid, brother may be considered as guardian for purposes of claiming exemption from tuition fees

(B) Academic Decisions :

1 Semester Scheme of examination for the Master s Degree was introduced in some of the subjects taught at the M B College at the Post-Graduate stage as an alternative to the existing traditional scheme of examinations on an experimental basis Option was given to regular students to appear either under the new scheme or under the traditional scheme

2 The following norms of work load for teachers and classes at M B College in terms of weekly period of 45 minutes each were prescribed —

A FOR TEACHERS

(i) (a) Professors—12

(b) Readers—15

(c) Lecturers with work-load of one full Theory paper in P G Classes—18

(d) Other Lecturers including those with work-load of less than one full theory paper in P G Classes—21

(ii) Three practical periods be counted equal to two periods, provided, however, that no teachers may take more than 24 periods in a week

(iii) Research guides will supervise the work of their Research Scholars in addition to the above work-lood

(iv) No additional periods will be counted for tutorial and Seminar work

B FOR CLASSES

(i) Theory periods for subjects other than Mathematics, Statistics and Accountancy for each section

(a) Under-graduate classes 6 periods per subject

(b) Post Graduate classes-4 periods par paper.

(ii) Theory periods for Mathematics, Statistics and Accountancy.

(a) Under-graduate classes—9 periods per subject.

(b) Post-graduate classes—6 periods per paper.

(iii) Practical periods in Science subjects :—

(a) P.U.C. and 1st Year T.D.C.—4 periods per batch.

(b) II and III Yr. T.D.C. Periods per batch—2 periods each for Botany and Zoology.

(c) Post-graduate-24 periods per subject.

3. All staff in the areas of teaching, Research and Extension will be treated on par with Professors, Readers, Lecturers and Jr. Lecturers as the case may be, provided they have the same qualifications as are prescribed by the Academic Council for these posts and subject also to the scales being not less than those prescribed by the University Grants Commission.

4. A revised scheme for the award of sessional marks in the faculties of Arts, Science and Commerce at the under-graduate and Post-Graduate examination was introduced from the session 1968-69.

5. The following rules in regard to admission of failures were adopted:—

(i) A student who fails for two or more years at an examination or if he fails in all subjects may not be admitted.

(ii) Freshers be given priority over failures for admission to various courses.

(iii) Admission to under-graduate courses be made by the Director on the recommendation of Admission Committee consisting of Head of Department or his nominee in each subject alloted to the faculty. Some percentage of seats, not exceeding 5 per cent may be kept reserved for which admissions may be given by the Director at his discretion.

6. It was decided that the students of First year and Second year of T.D.C. course shall compulsorily join one of the following:—

(i) National Cadet Corps.

(ii) National Sports Organisation.

(iii) National Service Scheme.

However, Women students, part time students and foreign students may be exempted from doing so Students joining one or the other scheme shall have to adhere to the scheme they join and will be required to attend these as they do in their subjects of studies, failing which they will be detained from appearing at the University examinations

7 A system of moderation of question papers was introduced for the examinations in the Faculty or Education

8 Every regular student in the Faculties of Arts, Science and Commerce at the Post Graduate and Honours stage will be required to complete 10 tutorials Similarly every under graduate student will be required to complete 10 written exercises in a subject in order to be eligible to appear at the University examinations

9 It was decided to award Gold Medals instead of books to the students standing First in order of merit at the University Examinations from the year 1968 69, onwards

10 In view of the fact that the process of assessment of sessional work in the Faculty of Education is entirely different from that in other faculties, it was decided that in case of M Ed and B Ed students, the original sessional marks awarded to them be counted towards the theory marks when they appear as ex students

11 Instead of having separate Committees of Courses in Physics and Mathematics in the Faculty of Agricultural Engineering, it was decided to include 2 more members of the Faculty—1- External and 1-Internal to the Committees of Courses appointed by the Faculty of Science in these subjects

12 It was decided that 'Associate Readers' be considered at par with Readers for the purpose of representation on University Bodies and necessary amendments to this effect made in the statutes

13 It was decided that 5% of the seats in Ag Colleges, Ag Engineering College and Home Science College, be reserved for the wards of Defence Services personnel and ex soldiers from the session 1969 70

14 It was decided that only 50% seats be reserved for the students of this University Admissions for the rest of the seats may be m on

the basis of merit and these should be open to students from all parts of the country.

VII. UNIVERSITY COLLEGES

1. School of Basic Sciences and Humanities (M.B. College), Udaipur.
2. S.K.N. College of Agriculture, Jobner.
3. Rajasthan College of Agriculture, Udaipur.
4. College of Veterinary and Animal Science, Bikaner.
5. College of Technology and Agricultural Engineering, Udaipur.
6. College of Home Science, Udaipur.
7. University Department of Law.

VIII. ASSOCIATED COLLEGES

1. Vidya Bhawan Govindram Seksaria Teachers' College, Udaipur.
2. Shramjeevi College, Udaipur.
3. Vidya Bhawan Rural Institute, Udaipur.
4. Meera Girls' College, Udaipur.
5. Udaipur School of Social Work, Udaipur.
6. Bhupal Nobles' College, Udaipur.
7. Lokmanya Tilak Teachers' Training College, (Dabok) Udaipur.

XI. EXTENSION LECTURES

The following were invited to deliver extension lectures :

Name of the invitee	*Topics of lectures*	*Department*
1. Dr. A.R. Desai	1. Modernization of India I 2. Modernization of India II 3. Modernization of India III	Sociology
2. Dr. Niharanjan Roy	1. Cities and Village in India 2. Secularism in India	
3. Dr. O.P. Bhatnagar	1. Indian Social Life during the British period. 2. British Social Life in India.	History
4. Dr. Avasthi	1. Emerging power pattern in Indian Politics. 2. India's Foreign Policy since 1962. 3. Reforming Indian administration.	Political Science

5	Dr S Santtappa	1 Photo Chemistry of Uranyl Salts 2 E S R Spatroscopy	Chemistry
6	Dr G P Srivastava	1 Microwaves	Physics
7	Dr P Bhattacharya M Sc, Ph D, F N I A H Commissioner to the Govt of India	Recent trend in Animal Husbandry	Animal Science
8	Dr K N Singh Head, Div of Ag Extn I A R I, New Delhi—12	Extn Edu with particular reference of its role and place in Agril Universities	Extension Education

X INTER INSTITUTIONAL ARRANGEMENTS

(a) US AID Advisers·

The following USAID Advisers were attached to the University during the period under review —

Name	*Position*	*Location*	*Period*
George R Gist	Chief of party University Admn	Udaipur	From Oct 29, 1967-Left
Lawrence A Best	Extension Edu	,,	Oct 16, 1967 Continuing
Fanchon Warfield	Home Science	,,	Aug 1, 1964 Continuing
Ralph D Barner	Veterinary and Animal Science	Bikaner	June 17,1965 Continuing
Leland O Drew	Agril Engg	Udaipur	Feb 1, 1968 Present
William A Wayt	Agril Econ	Udaipur	Jan 3 March 21, 1969
George Johnson	Animal Science	Udaipur	Jan 12 Feb 23, 1969

(b) Inter Institutional Arrangements with the Ohio State University for Imparting Higher Training to the University T

Participants sent abroad for Higher Training :

Name & Designation	*Period of training*	*Field of training*
Rajasthan College of Agriculture, Udaipur		
(i) Shri S.P. Pathak Lecturer in Horticulture	36 months	Ph.D. in Horticulture (Viticulture).
(ii) Shri O.S. Rathore Lecturer in Extension Education	36 months	Ph.D. in Extension, teaching Method.
College of Agriculture, Jobner		
(iii) Shri V. J. Shrikhande, Reader in Statistics	24 months	Ph.D. in Statistics.
(iv) Shri G.P. Khurana Lecturer in Ag. Chemistry	24 months	Ph.D. in Soil Physics.
College of Tech. and Agril. Engg., Udaipur		
(v) Shri N.C. Saxena Lect. in Civil Engg.	36 months	Ph.D. in Applied Mechanics.
(vi) Shri Y.C. Agarwal Lect. in Ag. Engg.	24 months	Ph.D. in Process Engineering.
College of Veterinary and Animal Science, Bikaner		
(vii) Shri Madan Lal Mathur	24 months	Ph.D. in Veterinary Anatomy.
Agricultural Experiment Station		
(viii) Shri R.D. Singh Asstt. Pathologist.	12 months	Post-doctoral degree in Physiology of Plants in relation to causation of deseases Symptoms.

(c) Participants who returned from abroad after completing higher training in U.S.A. :—

The following persons returned to the University after completing gher training under Inter-Institutional arrangements with the Ohio ate University —

Name	*Degree*	*Subject*	*Month of Return to India*
ımbhu N Chaturvedı	Ph D	Plant Pathology	Sept , 1968
gam S Khangarote	Ph D	Agronomy	June , 1969
mrıt Lal	Ph D	Anımal Scıence	Sept , 1968
ateh Lal	Joınt Programme	Agronomy	Sept , 1968
aje S Rawat	Post-doctoral	Dairy Technology	Sept , 1968
obind S Saxena	Ph D	Agronomy	Jan , 1969

XI. ENROLMENT & RESULTS

The total number of students enrolled for the various classes during 968-69 as members of the University was 2577 Statements showing etails of enrolment College wise and faculty wise and course and egree-wise are given as (Appendices—'H' & 'H'[1]) A statement showing holars registered for the degree of Ph D is given as (Appendix— H [2])

The University conducted examinations in summer 1969 The total umber of candidates who successfully passed the various examinations re given as (Appendix—'I')

A statement showing candidates who were awarded Ph D degree given as (Appendix—'J)

XII REGISTRATION OF GRADUATES

There were 18 Registered Graduates of the University in the elec-oral Roll during 1968-69

XIII. CONVOCATION

ı) **Degrees conferred :**

The Sixth Convocation of the University was held on January 28, 969 Shri Shriman Narayan, Governor of Gujarat, addressed the Con-ocation The welcome speech of the Vice Chancellor and the speech the Chief Guest are given as appendices (K & K[1])

The following degrees were awarded:—

Degree	Number of Recipients
1. B.Sc. (Ag.)	178
2. M.Sc. (Ag.)	79
3. B.Sc. (Home Science)	13
4. Ph.D. (Ag.)	4
5. B.V.Sc. & A.H.	54
6. M.V.Sc. & A.H.	14
7. B.A. (Pass)	364
8. B.A. (Hons.)	8
9. M.A.	230
10. Ph.D. (Arts)	3
11. B.Sc.	88
12. M.Sc.	46
13. B.Com.	34
14. M.Com.	10
15. LL.B.	137
16. B.Ed.	413
17. M.Ed.	19
18. Ph.D. (Edu.)	1
	1695

(b) Medals and other distinctions :

A list of the students who were awarded certificates of merit and Medals for standing first in order of merit at the examinations held in 1967-68 is given as appendix ('L')

CENTRAL LIBRARY

The Udaipur University Library is a system with Central Library at the apex and the Extension Library and the College Libraries as its branches. The Central Library caters the needs of the post-graduate teaching and research at Udaipur campus, while the Extension Library serves the day-to-day needs of the academic community of the city of Udaipur. With the shifting of the Central Library to new campus, the Library facilities have been extended to the Under-graduate students as well. The Central Library was started in 1964. But it has been progressing slowly and has yet to build a book collection worthy of a Univer-

sity Library The Extension Library which came into existence in 1960 was at one time the richest Library in the city But since 1966 it has not made any significant addition of reading material to its stock and its book collection is slowly getting out of date

However, two collections, separated by a distance of a couple of miles, do supplement each other, and when the two are amalgamated into one, the Central Library can speak of a sizable collection of books and other reading material

BUILDING

While the Extension Library continues housed in the Sahelion ki-Bari, the Central Library shifted from Ishwar Niwas to the basement of its own building on the University campus With the remaining three floors of this new building occupied by University office, the Library continues to face the shortage of space It is a common sight to find two rows of books occupying one shelf and rows of books lying on tables or on top of almirahas

It has been learnt that the Sahelion ki Bari building has been allotted to the Rajasthan Sahitya Akademi and we shall have to vacate it soon We do hope that sufficient space will be made available to the Library to expand its facilities and accommodate the Extension Library

Book Collection, Acquisition and Exchange

The Library spent Rs 2,69,000 on books and back volumes of periodicals and Rs 18,700 on current subscription of periodicals Following is the strength of our book collection

	Year 1968 69	Total
1 No of books added during the year	7356	44148
2 No of new periodical/Serial publications subscribed	19	199
3 No of microfilms added	36	148

READERS SERVICES

A Membership

The registration of members for both the Libraries was done at the Extension Library The undergraduate students and those pursuing post matric studies in all the educational institutions in Udaipur and

school teachers were given two books against two reader's tickets and their use was limited to the Extension Library only. The University and the college teachers, research scholars and post-graduate students were issued 6 books against 4 reader's tickets from the Extension Library and 2 reader's tickets from the Central Library. Given below are the figures of membership :

(i)	University and college teachers	137
(ii)	Students	1240
(iii)	School teachers	64
(iv)	Special members and Others	47
	Total	1488

Institution-wise figures of membership are given in (Appendix-'1').

It is worth-mentioning here that no fees were charged or deposit taken from any of the student and teacher members. However, each of the special members (17 in number) was charged annual membership fee of Rs. 6/- Library deposit of Rs 25/-(refundable) and 50 paisa as cost of two reader's tickets.

B. Visitors

As per figures recorded by the Gate Registers, the number of visitors, who made use of our facilities was as under :

(i)	Central Library	6087
(ii)	Extension Library	24095
	Total	30182

C. Loan of Books

The total loan of books for home reading from the two libraries is as follows:—

(i)	Central Library	10986 Vols.
(ii)	Extension Library	79311 Vols.
	Total	90297 Vols.

D Inter-Library-Loan

Thirteen documents and 4 microfilm rolls were borrowed from different Libraries for the benefit of our readers and lent 413 Vols and 12 microfilm strips to different Libraries

Special Services :

1 *The Library is in regular touch with the Indian* National Commission for Co-operation with Unesco and serves as a "Unesco Information Centre"

2 The Library operates "Deposit Collection' of books on American Literature, Life and Culture, received from the United States Information Service, New Delhi on loan

3 The Library issued regularly a bimonthly "Acquisition List", giving information about books added to the Library from time to time

4 The Library published "Catalogue of Theses and Dissertations" of its holdings in mimeograph form

Other Activities .

1 The Library arranged the following 'Book Exhibitions'

(i) The books of the "English Language Book Society' at the M B College Library on the 12th August, 1968 in collaboration with the British Council and the M B College

(ii) The books by and on "Mahatma Gandhi' in the Extension Library on the 2nd October, 1968

(iii) Childrens' books and other reading material at the Extension Library on 14th November, 1968 in collaboration with the Rajasthan Library Association

(iv) The 'Basic books on Agriculture and Veterinary Sciences' at the 'R C A Library' on the occasion of the Sixth Convocation of the University in conjunction with the R C A Library

(v) The books 'Education' at the Rajasthan College of Agriculture on the occasion of Annual Conference of the Teachers' Association during 14-16th March, 1969

2. To celebrate the 'National Library Day', the following activities were organised in the Extension Library on the 14th November, 1968 under the joint auspices of the Rajasthan Library Association, Udaipur Unit :

(i) **Bal Mela** (Children's Fair) was organized in the afternoon. The children from the Balmandir, Bhupalpura and the Vidya Bhawan Children's School presented some cultural programmes. Mrs. S.N. Mukerjee was the Chief Guest. On behalf of the local Booksellers, biscuits, bananas and pencils were distributed among the children, and children's books were presented to the 4 participant schools and also to the Children's Ward of the General Hospital.

(ii) A symposium on 'College Libraries' was organized in the evening. Shri G.S. Simlote welcomed the Guests on behalf of the University. Only one paper by Shri B.L. Bhanawat was presented. Dr. S.N. Mukerjee presided.

(iii) A number of documentary films on 'Libraries' were shown to the guests.

3. Shri S. M. S. Bhargava, Assistant Librarian attended the 'Fifth IASLIC Seminar at Durgapur (W. Bengal) in October, 1968.

4. The following dignitaries visited the Extension Library :

(i) Shri Govind Chandra,
Director of Vigilance, Govt. of India.

(ii) Professor Chandrahasan,
Director, Central Hindi Directorate,
Government of India.

(iii) Shri Ram Kishore Vyas, Revenue Minister,
Government of Rajasthan.

XIV. TRAVEL GRANTS

The following persons were given travel grants:—

Name and designation of the awardee	Amount Sanctioned	Purpose for which the grant was sanctioned.
1. Shri H. S. Hiran	350/-	For collecting data for the research work entitled "Nobles of Mewar" at the following places :

Name and designation of the awardee	Amount Sanctioned	Purpose for which the grant was sanctioned
		1 Rajasthan State Archives, Bikaner 2 Oriental Research Institute Jodhpur 3 National Archives, Delhi 4 University Library, Jaipur
2 Dr S B P Nigam	305/-	For collecting material for the research work entitled Nobility under the Sultan of Deccan towards fulfilment of D Litt degree at Salar Jung Museum Hyderabad
3 Shri C S Purohit	206/-	For visiting Anup Sanskrit Library, Bikaner, and Oriental Research Institute Jodhpur in connection with the research work entitled "Contribution of Mewar to Sanskrit Literature
4 Shri G L. Jain	270/-	For conducting analysis of the compounds by vapour phase Chromatographic Technique at the department of Chemistry, Indian Institute of Technology, Kanpur
5 Dr K L Kothari	750/-	For visiting Botanical Laboratories Madras University, Madras in connection with the Research project entitled ' Fungal diseases '
6 Shri H C Bhatt	450/-	For visiting the following institutions in connection with the research project entitled "Administration of Mewar State since 1857 to 1947 1 National Library, Calcutta 2 National Archives of India, New Delhi 3 State Archives of Rajasthan, Bikaner 4 Rajasthan University Library, Jaipur

Name and designation of the awardee	Amount Sanctioned	Purpose for which the grant was sanctioned.
7. Shri V.P. Mittal	300/-	For visiting (i) Grain Storage Laboratory and training Centre, Hapur, and (ii) Grain Testing Laboratory, Krishi Bhawan, Delhi.
8. Dr. K.S. Chauhan		For visiting Division of Horticulture, Indian Agricultural Research Institute, New Delhi-12 for studying the techniques and the equipment used for the plant nutritional and growth regulator work.

XV. OUR SCHOLARS' VISITS ABROAD

The following teaching staff of the University went abroad during the period under review as a result of their being selected under various fellowship schemes and training programmes:—

1. Shri J.F. Correia, Reader and Head of the Department of Soil and Water Conservation Engineering, College of Technology and Agricultural Engineering was selected for the award of a Fellowship for the Land Drainage Course for 3 months approximately under the Netherlands Government Fellowships for 1968.

2. Dr. G.S. Dogra, Lecturer in Zoology, M.B. College, Udaipur was awarded a post-doctoral fellowship by the National Research Council of Canada.

3. Dr. R.P. Srivastava, Insect Taxonomist, Agricultural Experiment Station was awarded the Alexander-Von Humboldt, Post-doctoral Fellowship to carry on research work at Tubingen (West-Germany) from September, 1968 to December, 1969.

4. Dr. Man Singh Manohar, Horticulture Specialist, Agricultural Experiment Station was awarded a fellowship by the Faculty of Agriculture of the Rebrew University of Jerusalem Robovot, Israel of the value of 600 £ (Israeli Pound) per month for a duration of six months. Dr. Man Singh Manohar worked on the problem of "Soil-plant water relations" during the period of fellowship.

5. Shri H.H. Dayal, Lecturer in Statistics, Rajasthan College of Agriculture, Udaipur was granted two years' study leave and one year extra-

ordinary leave to do Ph D in the field of experimental Designs Shri Dayal was granted Financial assistance by the State University of New York, at Buffalo

5 Dr G L Jain, Lecturer in Agronomy, Rajasthan College of Agriculture, Udaipur was awarded the Netherlands Government Fellowship for 1968 69 in the subject of Soil Science Plant Analysis of Soil Fertility from 6th September, 1968 for 9 months (approximately)

7 Dr O P Pareek, Lecturer in Horticulture, Jobner was awarded the Commonwealth Scholarship for higher studies offered by the Government of U K from October, 1968 to September, 1969

) Shri L S Sharma, Lecturer in Ag Zoology and Entomology, Rajasthan College of Agriculture, Udaipur was selected for one year Post-graduate Course in applied Entomology from the 30th September, 1968 in the Imperial College of London under the Colombo Plan

) Shri D D Shukla, Lecturer in Plant Pathology, Rajasthan College of Agriculture, Udaipur was selected under German Democratic Republic Scholarships for Post-graduate Studies from February, 1969

XVI CONFERENCES AND SEMINARS

The following persons attended verious Summer Institutes/Conferences/Seminars/and Training Programmes —

i) SUMMER INSTITUTE

Persons deputed	*Summer Institute*	Period
Rajasthan College of Agriculture, Udaipur		
Shri P M Sharma, Lecturer in Agril Eco	Summer Institute on Production Economics and Farm Management organised by U P Agril University held at Pantnagar (Nainital)	June 7–July 5, 1969

Persons deputed	Training	Period	Title of the paper
Electrical Engineering.	shable produce such as Fruits, Vegetables, meat, fish, Poultry and Dairy products, in Central Food Technological Research Institute, Mysore.	January, 1969.	
College of Veterinary and Animal Science, Bikaner			
Dr. P.K. Pareek, Lecturer in Obstetrics and Gynaecology.	Training in "Artificial" Insemination with emphasis on quality control and handling of frozen semen at Pantnagar, U.P.	One week w.e.f. 14th April, 1969.	
	Training in 'Methodology' of semen preservation by coconut Milk extender at Pantnagar, U.P.	One week from 15.7.69 to 21.7.1969.	
Dr. D.K. Sharma, Lecturer in Surgery.	Training on Safety aspect on Medical uses of Radiation, at Bombay.	from 5.5.69 to 31.5.69.	

Persons deputed	Training	Period	Title of the paper
Agricultural Experiment Station, Udaipur.			
Dr V P Mital, Insect Taxonomist	At Grain storage Research and Training Centre Hapur and grain testing Laboratory Krishi Bhawan New Delhi	27 1 69 to 5 2 69	Training in grain-storage structure handling & processing of grain on large scale & physical and Chemical analysis of grain
M B College, Udaipur			
Shri S N Joshi, Lecturer in English	Four months basic Course of Training at the Central Institute of English, Hyderabad	July 1, to Oct 31, 1968	
Shri J S Bhati, Supdt Physical Education	Condensed course at the National Institute of Sports, Patiala	15 1 1969 to 31 5 1969	

CONFERENCES, SEMINARS, MEETINGS, SYMPOSIUM etc.

Rajasthan College of Agriculture, Udaipur.			
Dr D S Saraswat, Reader in Dairy Science	Sixth All India Dairy Institute Conference held at Chandigarh	Jan 28-31, 1969	*Bacteriological quality of Ice* Cream Bacteriological quality of Khoa Significance of enterococci and coliform bacteria in raw milk,

Persons deputed	Training	Period	Title of the paper
Dr. K.S. Chauhan, Reader & Head Department of Horticulture.	Seminars on fruits organised by Punjab Agricultural University, Ludhiana, combined with I.C.A.R. Work-shop on fruit.	24.4.69 to 28.4.69.	Recent trends in manuring of mango.
Shri B.S. Rathore, Reader & Head in Agril. Economics.	Conference on Long-Range Agricultural adjustment Analysis held at USAID/New Delhi.	January 29-30, 1969.	
Shri M.L. Purohit, Lecturer in Ag. Economics.	Refresher course on Research Methodology organised by Indian Soc. of Agril. Economics held at Bangalore.	May 5-23, 1969.	Refresher course.
Dr. D.K. Misra	2nd All India Seminar on Research in Extension.	May 13 to May 17, 1968.	
Dr. S.L. Mathur, Lecturer in Extension.	—do—	—do—	Innovation Diffusion Research —A Review.

Persons deputed	Training	Period	Title of the paper
Mr A Basit, Lecturer in English	Diploma in the teaching of English and Second Lang at Central Institute of English, Hyderabad-7	2nd Dec , 68 to 30th March 1969	
Dr S N Saxena Professor and Head Agril Chemistry	Symposium sponsored by *Indian Society of Soil Science*, I A R I New Delhi	23 5 69 to 26 5 69	(1) Acid gradient elution studies on transformation of phosphorus in some soils of Rajasthan under the influence of act ve microbiological activity
			(2) Nature of organic Phosphorus compounds in some soil of Rajasthan
			(3) Studies on the nature of change and Jackson s discrete inorganic Phosphorus fractions using acid gradient elution technique

Persons deputed	Training	Period	Title of the paper
Dr. S.N. Pandey, Lecturer in Agril. Botany.	All India Symopsium on Maximisation of Agricultural Production.	23-25 Sept., 1968.	"Production of Methyl methan sulfonate induced damage by indoleacetic acid in seedlings of bread wheat."
R.P. Sarda, Pool Officer.	All India Symposium on Maximisation of Agricultural Production.	—do—	—do—
Dr. K.S. Kushwaha. (Prof. and Head) Zoology & Entomology.	Symposium on "National Resources of Rajasthan" organised by the University of Jodhpur and U.G.C.	23rd to 28th October, 1968.	"A review of progress in studies on forage and pasture insect pests of Rajasthan."
Shri J.C. Sharma.	Indian Science Congress Session at Bombay.	3rd to 9th Jan., 1969.	(i) on the external male genitalia of sympetrum vicinum (Odonata Libellulidae). (ii) Relative susceptibility of some cotton varieties to infestation by cotton pests.
Shri V.P. Mital, Lecturer in Zoology and Entomology.	International Seminar on integrated pest control at I.A.R.I. New Delhi. He visited the grain storage		

Persons deputed	Training	Period	Title of the paper
	and research and training institute Hapur and grain testing Laboratory New Delhi under U G C grant		
SKN College of Agriculture, Jobner			
Shri N K Nihalani Lecturer in English	Diploma course in the teaching of English at CIE Hyderabad	1 7 1968 to 30-3 1969	Wrote a term paper
Dr Prem Nath Reader in Horticulture	Paper setters workshop at Udaipur	24 7-1969 to 28-7 1969	
Dr R Prasada, Professor of Plant Pathology	Wheat Workers Work shop at Pantnagar	28 8 68 to 2 9 1968	
Dr K K S Chauhan, Reader in Ag Economics	Second Rajasthan Economic Conference at Jaipur	5-10 1968 to 6-10-1968	
Dr C Prasada, Reader in Extension Edu	Meeting of the Executive body at the Indian Society of Extension Education, New Delhi	14 10-1968	

Persons deputed	Training	Period	Title of the paper
Dr. K.K.S. Chauhan, Reader in Ag. Economics.	28th Annual Conference of Indian Society of Agril. Economics at Coimbatore.	23-12-1963 to 25-12-1968.	Economics of High yielding variety of Bajra in Jaipur District.
Dr. R. Prasada, Professor of Plant Pathology.	Celebration of Silver Jubilee and Seminar at Wheat Rust Research Station, Mahabaleshwar.	16-1-1969 to 17-1-69.	
Dr. B.P. Srivastava, Professor of Entomology.	International Seminar on integrated pest control at Delhi.	20-1-1969 to 24-1-1969.	
Dr. K.K.S. Chauhan, Reader in Ag. Economics.	All India Agril. Marketing Conference at U.P. Agril. Uni. Pantnagar.	14-2-1969 to 16-2-1969.	
Dr. K.S. Singh, Reader in Ag. Chemistry.	ICAR Symposium on Soil and Water Management at P.A.U. Hissar.	11-3-1969 to 14-3-1969.	
Shri M.R. Bajpai, Reader in Agronomy.	—do—	—do—	Effect on method of irrigation frequency mode of nitrogen application on production of barley.

Persons deputed	Training	Period	Title of the paper
Shri N L Agarwal, Lecturer in Ag Economics	Refresher course on "Research Methodology" at University of Agril Science, Bangalore.	5-5-69 to 23-5-69	
Dr R C Mehta, Lecturer in Extension	Second All India Seminar on "Research in Extension" at Bangalore	14-5-69 to 18-5-69	
Dr K S Singh, Reader in Ag Chemistry	Annual Meeting of the Indian Soci of Soil Science at Udaipur	23-5-69 to 26-5-69	Survey of well waters located in the Arid zone of Rajasthan and their influence on Soil Properties with special *reference to* salinity.
Dr K K S Chauhan, eader in Ag Economics	Seminar on Marketing of Fruits and Vegetables at Bombay.	22-5-69 to 24-5-69	
Dr G S Saxena, Lecturer Soil Physics	Annual Meeting of the Indian Soci of Soil Science at Udaipur	23-5 69 to 26-5-69	Effect of environmental factors and Water table depth on evaporation rates from soils

Persons deputed	Training	Period	Title of the paper
College of Technology and Agricultural Engineering, Udaipur			
Dr. K.N. Nag, Dean.	Indian Society of Agricultural Engineers Bangalore.	15-2-69 to 17-2-69.	Development of Hydraulic dynamometer.
Shri K.S. Hiran, Reader in Agril. Engineering.	Symposium on Photo Interpretation in Surveys of Soil and Land Resources.	9-4-69 to 12-4-69.	Air Photo Interpretation Techniques and their application in Agriculture.
Shri Y.S. Agrawal, Lecturer.	Indian Society of Agricultural Engineers.	15-2-69 to 17-2-69.	
Directorate of Extension Education, Udaipur			
Dr. D.K. Misra, Director, Extension.	2nd All India Seminar in Extension Research.	14-5-69 to 17-5-69.	
Shri P.N. Mathur, Assistant Editor.	"Short Course in Farm Information"	11-1-69 to 10-2-69.	
Shri S.N. Mundra, Instructor.	Agricultural Instruction Ext. Sponsored by the Israel Govt.	23-3-69 to 22-5-69.	
Central Library, University of Udaipur, Udaipur			
Shri S.M.S. Bhargava, Assistant Librarian.	15th IASLIC Seminar at Durgapur.	7-10-68 to 9-10-68.	

Persons deputed	Training	Period	Title of the paper
Directorate of Agricultural Experiment Station, Udaipur.			
Dr B K Srivastava	13th International Congress of Entomology held at Moscow.	2 8 68 to 9 8 68.	
	International Seminar on Integrated Pest Control held at New Delhi.	20 1 69 to 24.1 69	Importance of the studies on the bionomics of the Sorghum Shootfly in the Integrated Control Programme
	Meeting of the Advisory Board of the Indian Council of Agricultural Research, New Delhi.	28 3 69	
	National Demonstration Workshop at IARI New Delhi.	7 4 69 to 10 4.69.	
	Annual Workshop Meeting of the Coordinated Maize Improvement programme.	1.5 69 to 3 5 69	
Dr K.V. Paliwal, Soil Scientist.	Natural Resources of Rajasthan at Jodhpur, Symposium.	23.9 68 to 25.9 68	Quality of irrigation water & Nagour Distt. and itseffect on Soil Properties & Plant growth

Persons deputed	Training	Period	Title of the paper
	I.C.A.R. Annual Workshop on Soil Structure at Agril. College and Res. Institute, Coimbatore.	6-12-68 to 7-12-68.	Soil structural problems in South Eastern Region of Rajasthan.
	Symposium on Soil and water management at Hissar (Punjab).	11-8-69 to 13-3-69.	Quality of irrigation water their effect on soil properties & Crop growth in Rajasthan.
Shri B.P. Chakravati.	All India Coordinated Maize Conference, New Delhi.	1-5-69 to 3-5-69.	Invited to take part in the deliberation of the Maize Pathology workshop to prepare research Programmes.
	Symposium on Vegetable breeding and Seed Production at Katrain (Kullu) H.P.	14-6-69 to 16-6-69.	Invited to take part in the deliberations of the meetings, presented a paper entitled "Black rot of cabbage (Xanthomonas campestris) in Udaipur Rajasthan".

Persons deputed	Training	Period	Title of the paper
			Authors B P Chakarvati & S V Hegde
Dr K L Kothari, Assistant Plant, Pathologist	All India Coordinated Maize Conference, New Delhi	1-5-69 to 3-5 69	Invited to take part in the deliberations of the Maize Pathology workshop to prepare research programmes
	Botany Laboratory Madras University	17-2-69 to12-3-69	To learn advanced techniques of Plant Pathological Work
Shri B K Verma, Research Assistant (P Pathologist)	South East Asia Nematology Course at Aligarh & New Delhi	11-11-68 to 18-1-69.	—
Dr V P Mital, Insect Taxonomist	International Seminar on Integrated pest control organised by Entomological Society of India at New Delhi	3-1-69 to 24-1-69	Integrated control of **Careydon gonagra** Fabricus (Bruchidae Coleopetra) a serious pest of stored ground nut (Arachis hypogea L & Tamarind (Tamarindus India

Persons deputed	Training	Period	Title of the paper
Dı. L.M.L. Mathur, Entomologist, under I. C. A. R. Scheme.	56th Session Indian Science Congress Association, Bombay.	3-1-69 to 9-1-69.	1. Morphology of the alimentary canal of the mature larvae of Prodenia litura F. and Trichoplusiani Hubner. 2. Qualitative Chemical analysis of the ali-mentary canal of two noctuid and caterpillars feeding on cauliflower. 3. Effect of BHC on the rate of passage of food in larval prodenia liture Fabr. 4. Digestive Physiology of Clavigrelia gibbosa Spin.
Shri S. K. Verma, Research Assistant.	Participated in the International integrated pest control Symposium, New Delhi.	20-1-69 to 24-1-69	

Persons deputed	Training	Period	Title of the paper
Dr M S Manohar, (Horticulture Specialist)	Symposium on Planning for drought areas at I A R I New Delhi	6-5-69 to 7-5 69	Some recent approaches in Planning for drought areas
	International Symposium on Mango & Mango Culture at National Physical Laboratory, New Delhi	30-6-69 to 7-7-69	Problems of mango growing in Rajasthan
Dr Sudhir Kumar, Geneticist	"Genetics Today" International Conference on genetics held at Osmania University, Hyderabad (A P)	2 9-68 to 4-9 68	Modification on Physiology of Irradiated Seeds I by use of Chemicals
	Maize Workshop I A R I New Delhi	30-4 69 to 30-5-69	
College of Veterinary & Animal Science, Bikaner			
Dr A L Choudhary, Reader in Sheep Husbandary	Conference on "Intensive Approach to Animal Production at Bombay	12-5 69 to 15-5-69	
Dr K N Sharma, Lecturer in Pathology & Bacteriology	Workshop on Typing of Foot and Mouth Diseases virus at Mukteshwar	27-5-69 to 30-5 69	

Persons deputed	Training	Period	Title of the paper
M. B. College, Udaipur			
Dr. H. D. Kumar, Prof. & Head Department of Botany.	International Symposium on The 'Role of Genetics Today' at Hyderabad.	2-9-68 to 4-9-68.	
Shri S. H. Rizvi, Lecturer in Urdu.	All India Conference of the University Urdu Teachers at Aligarh University, Aligarh.	20-10-68 to 22-10-68.	
Dr. H. D. Kumar, Reader & Head, Botany.	Orientation Workshop at Govt. M. P.H.S. School Topdaram, Ajmer.	15-10-68 to 18-10-68.	
Shri G. R. Gupta, Lecturer in Sociology.	Eighth Indian Sociological Conference at Agra.	1-9-68 to 3-9-69.	Marriage Rituals Caste dynamics and social charge.
Dr. R. R. Kasliwal, Reader & Head Deptt. of Pol. Sc.	All India Political Science Conference at Bombay.	25-10-68 to 27-10-68.	
Dr. C. M. Jain, Lecturer in Political Science.	—do—	—do—	Power Polarisation in the Indian Political System.

Persons deputed	Training	Period	Title of the paper
Dr U N Upadhyaya, Reader in Physics	Nuclear & solid State Physics Symposium at I I T Powan, Bombay	28-12-68 to 31-12-68	
Shri B S Mathur, Head of Deptt of History	History Congress at Bhagalpur	29 12-68 to 31-12-68	
Shri H Solaman, Lecturer in Mathematics	Advanced level Seminar on Functional Analysis at Birla Institute of Technology & Science Pilani	13-12-68 to 19-12-68	
Shri K S Bhatanagar, Lecturer in Mathematics	All India Mathematical Conference at Bangalore	25-12-68 to 27-12-68	
Shri G V Damle, Lecturer in Geology	Science Congress (Geology Section) at Bombay	from 3-1-69	
Shri B L Dhakar, Offg Head of Deptt of Economics	All India Economics Conference at Hyderabad	27-12-68 to 30-12 68	
Dr S B Mathur, Lecturer in English	All India English Teachers, Conference at Bangalore	Last week of Dec, 1968	
Dr A N Bhattacharya, Head of Department of Geography	21st International Geographical Congress at New Delhi	1-12-68 to 8-12-68	

Persons deputed	Training	Period	Title of the paper
	Academic Conference in Geography at Govt. College, Bhilwara.	23-9-68 to 28-9-68.	
Dr. N.L. Hingorani, Prof. in Commerce.	XII Session of the Indian Commerce Association at Aurangabad.	28-12-68 to 30-12-68.	
Dr. R.K. Rai, Reader in Physics.	Indian Science Congress at Bombay.	3-1-69 to 8-1-69.	
Shri Ravindra Varma, Lecturer in Political Science.	Seminar on Problem of stability and security in South-East Asia at New Delhi.	10-3-69 to 12-3-69.	
Shri B.L. Dhakar, Lecturer in Economics.	Symposium regarding National Building Organisation (ECAFE Region) at New Delhi.	12-3-69 to 14-3-69.	
Dr. K.L. Sharma, Head of the Deptt. of English.	Annual Meeting of the Inter University Sports Board at the Indian Institute of Technology, Kanpur.	22-4-69 to 23-4-69.	
Dr. R.C. Dwivedi, Reader and Head of Deptt. of Sanskrit.	XXIV Session of the All India Oriental Conference held at Varanasi.	12-10-68 to 14-10-68.	

Persons deputed	Training	Period	Title of the paper
Shri Dev Sharma, Lecturer in Political Science	Symposium on Indian Youth at New Delhi	29-3 69	
College of Home Science, Udaipur			
Dr (Mrs) Leela Phadnis, Associate Dean	Ninth Biennial Conference of Home Science Association of India at Coimbatore	16 12-68 to 20 12 68	
	Attended U G C Seminar at Baroda	13 3 69 to 16-3-69	
	Textbook writing workshop on nutrition at Coimbatore	16 4-69 to 13 5 69	

XVII. SCHOLARSHIPS & FELLOWSHIPS

Allocation of Research Scholarships by the Univesity Grants Commission in Science, Humanities and Social Sciences subjects.

(a) The following candidates were selected for the award of U.G.C. research Scholarships each of the value of Rs. 250/- p.m. effective from the date noted against the name of each for a period of two years extendable by one year in special cases :

Name of the candidates	Subject	Supervisor	Date of joining
(a) Basic Sciences :			
1 Miss Turaka Nirmala Mary	Cytogenetical studies in some crop plants and weeds (Botany)	Dr C P Malik, Reader in Botany, M B College Udaipur	7 9-1968
2 Shri Anal Achyut Bhalekar	Stability constants of Metal Chelate Compounds (Chem)	Dr G V Bakore, Prof of Chemistry, M B College Udaipur	24 8-1968
3 Shri Surendra Singh Bhandari	Nuclear Physics, Physics	Dr J. Varma, Prof and Head of Deptt of Physics, M B College, Udaipur	24 8-1968
4 Shri Shushil Chandra Sharma	Agronomy Effect of N Fertilization placement of P and Methods of in Tercroping Maize (Zae ways L) with legume on Fodder production and Physico chemical properties of the soil (Agronomy)	Dr H G Singh, Prof and Head of Deptt of Agronomy R C A, Udaipur	21 8-1968

Name of the candidates	Subject	Supervisor	Date of joining
(b) Humanities and Social Sciences :			
1. Shri Behari Lal Jain.	Bhattarak Sakal Kirti (Sanskrit).	Dr. R.C. Dwivedi, Head of Deptt. of Sanskrit, M.B. College, Udaipur.	31-8-1968.
2. (Kum.) Rekha Dashottar.	Sawai Madho Singh and his times : 1727 to 1767 A.D. (History).	Dr. K.S. Gupta, Lecturer in History M.B. College, Udaipur.	26-8-1968.
3. Shri Sreedharan.	'A' Comparative study of the Hindi and Tamil social novels (Post Independence period) (Hindi).	Dr. D.R. Uppadhyaya, Reader in Hindi, M.B. College, Udaipur.	26-8-1968.

(b) University Merit Scholarships :

University Merit Scholarships were awarded to the candidates mentioned in the Appendix 'M' for standing first in order of merit

(c) Fellowships :

(I) U.G.C. Research Followship :

Shri S M Tokrawat was awarded Junior Research Fellowship of the value of Rs 300/– by the University Grants Commission for the year 1968 69 to work on 'The Incidence of Income-tax on Joint Stock Companies in India' under the supervision of Shri R K Agarwal, Head of the Department of Commerce

(II) C S I.R. Fellowship :

The following persons were awarded Senior and Junior Research Fellowships by the Council of Scientific & Industrial Research —

Name of the fellow	Amount	Date of joining
1 Dr. B S Srivastava	Sr Fellowship Rs 500/-	29-10-1968
2 Mr T Gopal	Jr Research Fellow Rs 300/-	24 10-1968

XVIII. STUDENT SERVICES

On Shri K L Bordia's appointment as Chairman, Secondary Board of Education, Ajmer, Dr K L Sharma was appointed as Dean Student Welfare with effect from June 1, 1968

In July, when the colleges reopened after the Summer Vacations, a programme for reorientation of new students was suggested to the various colleges Such a programme had already been introduced in the Engineering and Agriculture Colleges It was comparatively new to the associated colleges

It was suggested to the colleges to introduce an advisory programme. For this purpose, it was indicated that the admission lists themselves might break up the classes and names of students in groups of 10 to 15 together with the name of their advisor might be put up on the I'

Board so that the students know their advisor from the very beginning, and may go to him for help and guidance. In some colleges such an advisory programme is already in existence; others may introduce it seriously now.

The games and sports were organised by the Colleges themselves and their respective reports give an idea of their progress. The University Sports Board selected teams for participation in Inter-University Tournaments and organized Inter-college meets. This year, the Sports Board decided to concentrate on training rather than participation and the University did not send teams to Inter-University Tournaments. The Inter-College Tournaments were held partly at M.B. College and partly under the auspices of the College of Technology & Agricultural Engineering.

This year, a new feature of the Tournaments was the Youth Festival. It was a new experience, and the University Union deserves congratulations for organizing such a big gathering. The Mushaira, Kavi Sammelan, Debates, Dance and Dramas were very popular.

The University Union, consisting of the Presidents of the various college unions, was very effective this year. Its President, Shri Lalit Bhandari, represented it in several all-India seminars.

XIX. BUILDINGS

The activities of the Estate Office of the University are given here in brief:—

MAINTENANCE :

One of the important functions of the Estate Office is to look-after and maintain the University buildings and land. The amount provided for this purpose is only Rs. 1.00 lac for all the buildings including those at Jobner and Bikaner. Out of this amount 40% is utilised in the salaries of the staff and office expenditure. The remaining amount is extremely inadequate to maintain the buildings etc. properly. Efforts were made to patch up the urgent demands for maintenance of important buildings.

ND ACQUISITION

A Master plan of the University with a New Campus near Pratapagar was approved It involves about 900 Bighas of agricultural (Mostly arren) land / A notice under section 4 for 315 bighas was issued by the State Government in the year 1963 followed by a recent notification under section 6 in June, 1969 i e after six years The Government has been moved to notify another 362 bighas of land on the Southern side under section 4 of the Land Acquisition Act As a matter of fact no land could be acquired by law within this long period inspite of good efforts The land available at present with the University is about 200 bighas acquired by the State long back for the Polytechnic institution

BUILDING ACTIVITY

Two major buildings known as Library Building and College of Technology and Agricultural Engineering Building were under construction These buildings are now in their final stage and have been occupied by the Administrative office and Library in the Library building, and College of Technology and Agricultural Engineering in the building constructed for it Both these buildings have been constructed by the local P W D and are super examples of fine Architecture Besides these two main buildings, a number of original works were undertaken by the Estate Office, at Vallabhnagar farm, at the Rajasthan College of Agriculture and at M B College Some of the works executed are as noted below —

1 RAJASTHAN COLLEGE OF AGRICULTURE
   (a) Extension of building at Pilot Milk Supply Scheme
   (b) Pot Culture House
   (c) Grower House on Poultry farm

2 VALLABHNAGAR FARM
   (a) Farm Laboratory
   (b) Lecture Room
   (c) Shed for processing Experimental material
   (d) Departmental Stores for Experimental works and Godown
   (e) Students Home
   (f) Two residential quarters

These works are in progress and will be completed in the next year:—

(i) Extension of Physics & Chemistry Lab. at the M.B. College.

(ii) Overall expenditure incurredthe by Estate Office in the Financial year 1968-69 on the works, maintenance etc. amounts to Rs. 4.96 lacs.

FINANCES :

The Financial position of the University during the period under review is given below :

		Rs. P.
1. Travel Grants	—	2795=15
2. Foreign Travel	—	17025=00
3. Conferences & Seminars	—	—
4. Scholarships & Free Studentships	—	36503=22
5. Development	—	2090589=00
6. (a) Buildings :	—	2300382=00
(b) Non-recurring Items.	—	1056218=00

7. Finances:— (a) Expenditure— Total expenditure of University including Non-Recurring and Capital Expenditure comes to Rs. 1,47,53.336/- for its all constituent units along with the University administrative office.

(b) Revenue— Over all revenue of the University comes to Rs. 1,47,53,336/-. This includes grants in aid from : (i) State Government (ii) I.C.A.R. (iii) C.S.I.R. (iv) U.G.C. (v) University's own Revenue (vi) and other bodies.

PART II

REPORTS FROM THE COLLEGES AND SCHOOLS

I. RAJASTHAN COLLEGE OF AGRICULTURE, UDAIPUR

Dr. N. Prasad, worked as Dean of this College throughout the year. The teaching strength of the staff was as under:—

Professors	5
Readers	10
Associate Readers	4
Lecturers	43
Jr. Lecturers and Instructors.	12

The College consists of 11 Departments—Agronomy, Animal Husbandry, Dairy Science, Horticulture, Agril. Economics and Farm Management, Statistics, Agril. Extension, Agril Chemistry and Soil Science, Agril. Botany, Plant Pathology and Zoology and Entomology. The College of Home Science with an Associate Dean as its Head is also running in the College Campus under the Dean of this College.

The College possesses 225 acres of land but more land is in the process of acquisition. The College has 4 Farms—Agronomy Farm, Animal Husbandry Farm, Horticulture Farm and Poultry Farm.

Research projects under P.L. 480 scheme were sponsored by the I.C A.R. in the following departments :—

1. Agronomy
2. Animal Husbandry (Poultry)
3. Dairy.

PILOT MILK SUPPLY SCHEME :

The building for this Scheme was constructed with the fund provided by the State Government in 1959-60 for training students in Dairy Technology at Rajasthan College of Agriculture, Udaipur. The USAID provided for the cost of Dairy Equipment and Machinery which

installed by Ohio University in 1962-63. The Dairy Plant was commissioned on January 1, 1964. The State Government has also provided for financial assistance through grant-in-aid for the purchase of vehicles and equipment. The installed capacity at present is 4000 litres of milk. The scheme was supposed to run on a 'no-profit-no-loss basis'. In the first three years there were considerable losses, but in the 4th year the loss was small. And last year there was no loss. For the first time the scheme was self-sustaining for all its running expenditure.

During last year 11.66 lakh kg. of milk was procured from 1360 rural producers of 166 villages attached to 81 Milk Collecting Centres on five routes spread over a distance of 150 K.M. from Udaipur City, in the district of Udaipur, Bhilwara and Chittorgarh. Likewise 10.76 lakh Kg. of pasteurized standard milk was distributed to the public of Udaipur through 42 conveniently located Booths. Milk is also supplied to Hostels, Hospitals and Government Departments. The Dairy also supplied the quality Ice-Cream, Butter, Ghee and other Dairy Products to the public. A P.L. 480 Research scheme on Dairy and Food product is also being conducted at the Dairy. This was sanctioned by the U.S. Department of Agriculture.

ENROLMENT :

In all 569 students were enrolled for under-graduate classes. The details are as follows:—

Class	No. of Boys	No. of Girls	Total
Pre-Agriculture Pt. I.	32	Nil.	32
Pre-Agriculture Pt. II.	185	—	185
B.Sc.Ag.Pt. I.	79	—	79
B.Sc.Ag.Pt. II.	67	—	67
B.Sc.Ag.Pt. III.	110	1	111
B.Sc. (Home Sc.) I Year.	—	35	35
B.Sc. (Home Sc.) II Year.	—	24	24
B.Sc. (Home Sc.) III Year.	—	36	36

77 Students were admitted to Post graduate studies The details are as follows —

		Previous	Final
1	Agronomy —	10	5
2	Plant Breeding & Genetics	1	9
3	Extension —	5	4
4	Entomology —	—	—
5	Dairy Science —	—	8
6	Horticulture —	6	7
7	Agri Economics —	5	1
8	Animal Science —	—	1
9	Soil Science —	—	8

RESULTS

Name of the Class	No of the students	No of students Passed
Under-graduates —		
B Sc Ag	95	81
Post-graduates —		
M Sc Ag	42	34

LIBRARY

The R C A Library has continued to grow in respect of members, materials and services keeping pace with the increasing activities of the College related to all the three functions—Teaching, Research and Extension It has been providing satisfactory reading material and services particularly in the field of Agriculture, Agricultural Engineering and Home Science

The R C A Library was able to get some liberal fund after a period of four years Consequently, this year special efforts could be made to fill in the 'gaps' to procure 'Available' material of particular organs such as FAO, CAB, USDA, ICAR, etc to strengthen particular areas in

which intensive research is going on. Some important Reference-Volumes were procured e.g. (i) RUHLAND : Encyclopaedia of Plant Physiology (Springer-Verlog, Berlin) Vol. I-XVIII; (ii) MELLOR : Comprehensive Treatise on Inorganic and Theoretical-Chemistry (Longmans) Col. I-XVI and its supplements; (III) PAECH & TRACEY : modern methods of plant analysis (spring Verlog, Berlin) Vol. I-VII; (iv) Flora; (v) HOOKER'S Icones Plantanum; (vi) Annals of the Royal Botanical Garden, Calcutta; (vii) HARNER & SHIPLEY : Cambridge Natural History, Vol-I-X; (viii) LANKESTER : Treatise on Zoology (Admms) Vol. I-XII; (ix) Fauna of British India including Ceylon and Burma; (x) Annual Review of Entomology, Vol. I-XII; (xi) India Journal of Entomology, Vol. I-VII; (xii) Annual Review of genetics and others. The procurement of the above-mentioned volumes has cost Rs. 23,000/-.

The significant achievements in its internal, technical and other services worth-mentioning are as under:—

1. The Library managed to procure some books and other reading material worth Rs. 11000/- approximately supplied gratis to this institution.

2. The Micro-Materials of some important reading sources have been added.

3. Students-Aid-Fund-Book-Stock has been raised with addition of a few more titles.

4. Ephemeral-Collection has been raised by a few hundred titles with better arrangements.

5. To cope with the activity of the increased number of departments of post-graduate studies and increased consultation, the following steps were taken:—

   (a) One single-door-entry and the extension of Library space-area for the General Reading-Room section have been created by having some addition and alteration.

   (b) The purchase of material such as Reference—Volumes, Advances, Research Reports, Micro-Material and the

subscription to at least four or five representative journals of standing in each branch have been made

(c) Departmental Libraries were established last year with a small issue of about 1700 books (in total to the various departments from this library) the total rose to 1900 issues this year

(d) The Library managed to procure about 300 important titles in total from other libraries such as Univesity Central Library, Saraswati Bhawan, Udaipur, Vidya Bhawan Teacher's Training College Library, Udaipur, I A R I Library, Botanical Survey of India Library, Rajasthan University Library Jaipur, Indian Society of Agril Economics, Bombay etc

6 To acquaint the readers with new journals and current literature, some issues of 'Periodicals and serials' and "Introductory-service Bulletin" were brought out containing thought-contents and bibliographical details of a few serials and journals

7 Display services were intensified in the form of technical and Informative charts and maps etc With a view to stimulate the reading habits among readers

8 Reference service was intensified

9 Issued 'List of New Arrivals'

10 Issued the comprehensive 'List of Periodicals' under Library holdings

11 Issue of one publication titled 'Introduction to the Periodicals and serials on history and its relative subjects under the holdings of different libraries in Udaipur

12 Library intelligence Test was held for different groups of students with improved method This is a unique activity undertaken by the library every year The names of prize winners of the Test during this sessions are given below —

(a) Shri Karuna Shanker Oza (Pre-Agriculture Classes)

(b) Shri Ramesh Kumar Kamra (B Sc Ag Classes)

(c) *Shri Prem Prakash Mathur (M.Sc.Ag. Classes)*

(d) Miss Anju Bala (Home Science Classes)

13. *Important statistical data of the Library are as under:—*

(a) Total No. of Books :	25323
(b) Total No. of Periodicals under subscription :	387
(c) Total No. of Bound Volumes and periodicals :	3400
(d) Total No. of Ephemerals :	2168
(e) Total No. of Micro-Materials	98
(f) Total No. of Members enrolled :	1192
(g) Total No. of Material Issued :	69206
(h) Total No. of Material consulted :	139900
(i) Total No. of Reference Quaeries answered :	6115
(j) Total No. of Transaction :	278200
(k) Total Amount spent :	Rs. 1,10,000/-
(l) Total Capital Holding :	Rs. 5,80,000/-
(m) Total No. of persons attended :	69206
(n) No. of Books per registered readers :	1601
(o) Average use of books per reader :	295

STUDENT-TEACHER RELATIONS :

Under the Internal Grading System, an Adviser is assigned to each students by the Dean at the time of his admission. The Adviser helps the student in planning the programme-of his studies and in the choice of courses. He also helps in determining the credit load which the student can safely and conveniently carry in each semester. Students are expected to keep constantly in touch with their Advisers so that the latter may watch their progress and guide them along right lines. Under the Internal Grading System, the teacher and the taught are always on their toes. Their relations remained cordial during the year.

EXTRA CURRICULAR ACTIVITIES

1 The Badminton Team of this college participated in the Rajasthan State and Inter District Badminton Tournament held under the Auspices of Udaipur Badminton Association from 4th December to 8th December, 1968 in Town Hall, Udaipur

2 The 7th Inter-College Udaipur University Tournament was held under the auspices of College of Technology and Agril Engineering, Udaipur at Rajasthan College of Agriculture Stadium from 9th February, 1969 to 15th February, 1969

In this Tournament also, the College Team won in Volley Ball and Rifle Shooting

During the year, the college started to award one Gold Medal to the Athletic Champion of Udaipur University in the memory of late Shri Vrandavan Sharda who was Lecturer in the Agronomy Department of this college In the current session, the Gold Medal was awarded to Shri S C Kulhari of Jobner College

MISCELLANEOUS

YOUNG FARMERS' ASSOCIATION

The activities of the Association started this year on 5th August, 1968 with the election of class representatives to the Students' Council of Y F A

The Dean also nominated Dr S N Saxena, Warden and Shri R K Bhargava who joined as Asstt Dean Students Welfare on 1st August, as teacher advisers to the Association

The first meeting of the Association was held on 7th August, 1968 under the Chairmanship of Dean, R C A for election of the Office-bearers for the year 1968 69

The Association was formally inaugurated by Shri N N Acharya, Speaker, Rajasthan Legislative Assembly, on 2nd Dec, 1968 Shri Acharya called our constitution as the most democratic one and expressed his heartiest wishes for the success of the Association

ANNUAL FUNCTION

This year, the Annual function of Y F A was a Colourful event of the year and was celebrated for a week The highlight of the function

was "Kavi Sammelan" which was organized for the first time in the College and proved to be a grand success.

OTHER HIGHLIGHTS :

(a) Shri D.N. Gupta and G.P. Pathak were declared as the best students of the year.

(b) Mr. Lalit Bhandari was elected President of the University Students' Council. He was deputed by the University to attend the following seminars :

(i) Student leadership in higher education (a seminar for student leaders) at M.S. University of Baroda, organized by U.S.E.F. in India (Nov. 1-3, 1968).

(ii) 15th National student congress and general council meeting of N.C.V.S.I. (29th Jan. to 31st Jan. 1969) at Patna.

(iii) National Student Conference on student programme in Gandhi Centenary on 1st and 2nd Feb., 1969 at Patna.

VISITS & TOURS OF STUDENTS OF OTHER COLLEGES :

18 parties of Agriculture Colleges and Training Centres from Rajasthan and other States visited this College during the year. Students of Final year of this College also went on study tours at many important places.

OTHER DEVELOPMENTS :

The area behind the main building of this College was un-levelled and had Kachha roads. This year, the provision was made for levelling of the area and construction of pacca roads. The work was taken in hand by the Estate Officer of the University who got it completed. A lawn with some flower-plants was raised in the barren areas surrounding the new buildings.

II. S.K.N. COLLEGE OF AGRICULTURE, JOBNER

The College was first established in 1947. It was taken over by the Government of Rajasthan in 1955 and thereafter transferred to the University of Udaipur in 1962.

Dr R M Singh remained as the Associate Dean for this Campus throughout the year

ADMISSION RULES

Admission are made on merit basis Students having secured 45% marks or above in High School or Secondary School Examination with Science or Agriculture Group were given admission to Pre Professional Part I In Pre-Professional Part II, students having 54% or above marks in Higher Secondary or Pre-University Examination were admitted

Prescribed courses were taught in Pre Professional Parts I and II and B Sc (Ag) and the following are the details of the number of students registered during the year 1968 69

Pre-Professional	Part I	28
Pre-Professional	Part II	147
B Sc (Ag)	Part I	88
,,	Part II	108
,,	Part III	117

The following are the results of different under-graduate classes

Course	No appeared	No passed	Pass percentage
Pre-Prof II	98	64	65 3
B Sc (Ag)	120	101	84 16

LIBRARY

During the year, the position of books and periodicals was as under —

	Total	New receipts during the year
Books	10,761	1,894
Government Publications	1,154	6
Bound Journals	1,177	295
Periodicals including Indian and foreign Journals	165	

Open shelf System was in vogue and services were available for twelve hours a day in order to give more consulting and reading facilities to the students and the teaching staff Daily average working of the Library is as under —

Daily average attendance of students.	110
Daily average attendance of teachers.	25
Daily average issues of books etc.	85

STUDENT-TEACHER RELATIONS :

On admission the students are assigned to different members of the teaching staff who act as advisers. The object of this system is to promote closer contacts between the students and the members of the teaching staff. The advisers help the students in planning the programme of their studies and in the choice of their courses. They also help in determining the credit load which can be safely and conveniently carried by the students. Students are expected to be in constant touch with the Advisers who watch their progress and guide them along right lines.

The student-teacher relations remained cordial during the year.

EXTRA-CURRICULAR ACTIVITIES—STUDENTS' WELFARE :

Physical Education:—As usual the Department of Physical Education did well throughout the year arranging games and sports for students and teaching staff of the Campus.

In the inter-classes tournaments held this year the overall general championship was won by M.Sc. students.

Our players did very well at the Udaipur University Tournaments held this year. It is a matter of great pride that our College once again won the general sports championship. A gold medal was awarded to a student of this College who stood first in four items. University colour was also awarded to a student of this College.

NATIONAL CADET CORPS :

National Cadet Corps:—There are two NCC Boys in this College, 5th and 6th in which 90 and 52 cadets were enrolled. The strength was further reduced as the NCC training was made optional.

Regular parades started from the 1st August 1968 and ended in March 1969. Attendance on parades was quite satisfactory. The

Annual Training Camps could not be held as there was strike in the College during that period The general training was however far better than in the previous year as the new Instructors were drawn from active service More training equipments were supplied from the new Bn More emphasis was laid on bayonet fighting and practice of aiming and firing

The B and C Certificate Examinations were held in the month of February 1969 and the performance of our cadets was very good as expressed by the President of the Examination Board to the Dean

The Annual function of the College was held on the 18th and 19th March, 1969, it was inaugurated by Shri Shobharamji, the Hon ble Minister for Agriculture, Rajasthan

As usual, a Farmers Fair was organised on this occassion All the Departments of this College, Extension Department of Udaipur and Bikaner Campuses and various State Departments participated in making the Fair a success About 10,000 people visited the exhibitions and demonstrations in the Fair

DISTINGUISHED PERSONS WHO VISITED THE CAMPUS DURING THE YEAR

1 Dr L A Best, Extension Visitor USAID

2 Dr C A Lamb, Chief of Party, OSU Team

3 Dr G R Gist, Chief of Party, OSU Udaipur University

4 Dr G S Taylor, Professor of Agronomy, OSU

5 Dr George Johnson Chairman, Department of Animal Science, OSU

6 Dr M G Smith, Campus Co ordinator, OSU

7 Dr William A Wayt, Professor consultant in Agricultural Economics, OSU-USAID Team

8 Prof Gil More, Associate Chairman, Dairy Science Department, Ohio Ag Research Development, Wooster, OSU

9 Mr Guy L Haviland of American Embassy

10. Mr. Beninard Funk.

11. Dr. P. Bhattachrya, Animal Husbandry Commissioner, Government of India.

12. Dr. K.N. Singh, Head, Divison of Ag. Extension, IARI.

13. Dr. Raj Krishna, Head of Economics Department Rajasthan University, Jaipur.

14. Dr. Daya Krishna, Professor, of Philosophy Rajasthan University, Jaipur.

MISCELLANEOUS :

The following persons were deputed for Conferences/Seminar/Training/Symposium and meetings:—

S No	Name of persons deputed	Designation	Conference/Seminar/Trg /Symposium and meetings etc to which deputed	Dt of conf / sem etc	Title of papers presented
1	Mr N K Nihalani	Lecturer in Eng	Diploma course in the teaching of English at CIE, Hyderabad	1 7 68 to 30 3 69	Wrote a term paper
2	Dr Prem Nath	Reader in Hort	Paper setters workshop at Udaipur	24 7 68 to 28-7 68	
3	Dr R Prasad	Prof of Pl Patho	Wheat workers Workshop, Pantnagar	28 8 68 to 2 9 68	Production, storage and distribution of inculum of Pathogens causing principles diseases of wheat
4	Dr K K S Chauhan	Reader in Econ	2nd Raj Econ Conference Jaipur	5-10 68 to 6 10 68	
5	Dr C Prasad	Reader in Ext Edu	Meeting of the Executive Body at the Indian Sec of Ext Edu N D	14-10 68	
	Dr K K S Chauhan	Reader in Ag Eco	20th Annual Conf of Indian Soc of Ag Econ at Coimbatore	23 12 68 to 25 12 68	Econ of High yielding variety of Bajra in Jaipur District
	r V S Kulhari	Lect in Extension	Trg in Agri Information Communication at New Delhi	27-1 69 to 11-2-69	

o.	Name of persons deputed	Designation	Conference/Seminar/Trg./Symposium and meetings etc. to which deputed	Dt. of conf./ sem. etc.	Title of papers presented
	Dr. R. Prasada	Prof. of Pl. Patho.	Celebration of Silver Jubilee and Seminar at Wheat Rust Res. Station Mahabaleshwar.	16-1-69 to 17-1-69	Wheat disease-present position and future prospects with special ref. to breeding for resistance.
	Dr. B.P. Srivastava	Prof. of Entomology	International Seminar on integrated pest control at Delhi.	20-1-69 to 24-1-69	
	Dr. K.L.S. Chauhan	Reader in Ag.Eco.	All India Agril. Marketing Conf. at U.P. Ag. Univ. Pantnagar.	14-2-69 to 16-2-69	
.	Dr. K.S. Singh	Reader in Ag. Chem.	ICAR Symposium on Soil and Water Management at PAU, Hissar.	11-3-69 to 14-2-99	
	Mr. M.R. Bajpai	Reader in Agro.	—do—	—do—	Effect of methods of irrigation frequency and mode of nitrogen application on production of Barley.
	Mr. R.K. Raina	Lect. in Maths.	Summer Institute in Mathematics at Punjabi University Patiala.	7-4-69 to 17-5-69	

S No	Name of persons deputed	Designation	Conference/Seminar/Trg /Symposium and meetings etc to which deputed	Dt of conf / sem etc	Title of papers presented
14	Mr N L Agarwal	Lecturer in Ag Econ	Refresher course on "Research Methodology" at Uni of Agril Sc Bangalore	5-5 69 to 23-5 69	
15	Dr R C Mehta	Lecturer in Ag Extn	2nd All India Seminar on Res in Extension at Bangalore	14-5-69 to 18-5-69	
16	Mr M R Yadav	Lecturer in Physics	Summer Institute in Physics at B I T S, Pilani, Raj	19-5-69 to 29-6-69	
17	Dr. K K S Chauhan	Reader in Ag Econ	Seminar on Marketing of fruits and vegetables at Bombay	22-5-69 to 24-5-69	
18	Dr K S Singh	Reader in Ag Chem	Annual meeting of the Indian Soc of Soil Sc at Udaipur	23-5 69 to 26-5-69	Survey of well waters located in the Arid zone of Rajasthan and their influence on soil properties with special reference to salinity.

S. No.	Name of persons deputed	Designation	Conference/Seminar/Trg./Symposium and meetings etc. to which deputed	Dt. of conf./ sem. etc.	Title of papers presented
19.	Dr. G.S. Saxena	Lecturer in Soil Research Physics (I.C.A.R./ Scheme).	—do—	,,	Effect of environmental factors and water table depth on evaporation rates from soils.
20.	Mr. S.K. Bansal	Jr. Lect. Dairy Sci.	Summer Institute on Milk Production at N.D.R.I., Bangalore.	2-6-69 to 11-7-69.	
21.	Mr. O.P. Garg	Lect. in Agronomy.	Summer Institute on Water Management at PAU Hissar.	9-6-69 to 9-7-69.	

PERSONS WHO RETURNED AFTER HIGHER TRAINING FROM ABROAD

1 Dr C P S Yadav, Lecturer in Entomology, came back on 11 2 69 after obtaining the degree of Ph D from the University of Massachusetts, U S A

2 Dr G S Saxena, Lecturer in Physics, came back on 3 4 69 after obtaining the degree of Ph D from the Ohio State University U S A

3 Shri S K Shukla, Lecturer in English, returned on 5 9 68 after his training at the Central Institute of English, Hyderabad

PERSONS ON DEPUTATION ABROAD FOR HIGHER TRAINING UNDER INTER-INSTITUTIONAL PROGRAMME

1 Shri V J Shrikhande, Reader in Statistics, Proceeded on 18 8 69 on 24 months deputation for Ph D at the Ohio State University, U S A

2 Shri G P Khurana, Lecturer in Ag Chemistry proceeded on 18 5 69 on 24 months deputation for Ph D at Ohio State University, U S A

3 Dr R D Singh, Assistant Plant Pathologist (Res) proceeded on 18 5 69 on 12 months' deputation for Post-doctoral research at Ohio State University, U S A

PERSONS WHO WENT ON LEAVE FOR HIGHER TRAINING ABROAD

1 Dr O P Pareek, Lecturer in Horticulture for Post doctoral research at the University of Nottingham, U K

2 Shri G L Jain, Lecturer in Poultry Science for Ph D at the University of British Columbia, Canada

3 Shri J S Teotia, Poultry Manager for Ph D at Collorado State University, U S A

4 Shri P R Verma, Junior Lecturer in Plant Pathology for Ph D at the University of Saskatchewan, Canada

SCHOLARSHIPS :

A sum of Rs. 62,423 was paid to the students under various scholarship schemes as detailed below:—

Scheme	No. of students	Amount
Merit-cum-Need	56	Rs. 27,600
Merit	44	Rs. 30,480
Scheduled Caste/Tribes and Half Freeships	7	Rs. 4,343

National Loan Scholarships were awarded to six students to the tune of Rs. 6,580. In addition, a sum of Rs. 18,600 was paid by the Director of College Education, Rajasthan to 31 students as Study Loan.

Full freeships and half freeships amounting to Rs. 2,604 was granted to 46 students of under-graduate classes.

The Following students were awarded University Scholarship for merit in the Examinations mentioned against them:—

Shri Deepak Bhatnagar	Pre-Prof.	Rs. 15 p.m.
Shri Ram Lal Jat	T.D.C. I	Rs. 30 p.m.
Shri Surya Ram Mandal	T.D.C. II	Rs. 30 p.m.
Shri Mahesh Chand	T.D.C. III	Rs. 100 p.m.

III. COLLEGE OF HOME SCIENCE, UDAIPUR

The Home Science College entered its third year in July 1968. It started in 1966 with only 2 girls and one Lecturer. In the next session, the students' strength increased to 67 in the First and Second Year classes, combined. The number of members on the staff also increased to five. An Associate Dean joined in the second year.

ENROLMENT :

In all, there were 102 students enrolled in the year 1968-69:—

Ist year		40 students
IInd year		26 students
III year		36 students
	Total	102 students

Two foreign students joined this college this year, one from Somali, the other from Malaysia

COURSE OF STUDY

In the First year, basic sciences and humanities were covered and in the Second year Home Science technical subjects were begun In the third year, subjects in the five major areas of Home Science continued

The following were the courses offered for the three years during the year

FIRST YEAR

First Semester

English
Chemistry (General)
Hindi
Gen Psychology
Health Education and Hygiene
Mathematics*

*Pre requisite course for Biology students for higher secondary

SECOND SEMESTER

English
Chemistry (Organic)
Sociology
Bacteriology
Foods
Physiology

SECOND YEAR (THIRD SEMESTER)

Bio Chemistry
Home Management
Basic Nutrition
Pre Natal and Infant care
Applied Arts
Extension

FOURTH SEMESTER

Textiles and their care
House and its furnishings

SCHOLARSHIP :

Two girls were awarded ACAR Scholarships and the foreign students from Somali is on Government of India Scholarship.

EXTRA CURRICULAR AND SOCIAL ACTIVITIES :

The Home Science Club of which every student is a member, organised extempore speeches, debates, music competition and picnics etc.

The Club celebrated the annual Home Science Day when an exhibition was also arranged to enlighten the public about the study and opportunities of Home Science Education. Several competitions were organised for the students as well as high school children, homemakers etc. to which the response was good. The girls also took part in the cultural activities organised by R.C.A. during the Annual Day Celebration.

The students took active part in the Youth Festival organised by the University and won several prizes.

HOSTEL :

The Home Science girls shifted to the University Girls' Hostel which was also shared by students from M.B. College and Experiment Station.

RESEARCH :

A small survey was conducted to find out the varieties fuel used for cooking purposes in Udaipur city and an experiment was carried out to determine the best fuel for cooking considering the time involved, cost, cleanliness and care required. The paper has been accepted by the Indian Journal of Home Science for publication.

EXTENSION :

The staff and students took keen interest in the activities of the Directorate of Extension. A number of lectures and demonstration were given by staff members on different subjects. A few demonstrations were also given at the Orientation Training Centre in the applied Nutrition Training Programme. Lecture on balanced diet followed by quantity feeding programme was organised with the help of meal planning students for the peace corps Volunteers at Rural Institute.

The staff contributed eight popular articles on Home Science to 'Lok Vigyan' magazine.

IV. COLLEGE OF TECHNOLOGY & AGRICULTURAL ENGINEERING, UDAIPUR

The academic year 1968 69 was one of steady progress for the development of this college On 29th June, 1968 the College office was shifted to its new and permanent building on the new campus When the office was shifted to the new building, its ground floor had been completed but electric fittings, shutterings of windows and doors and white washing were still incomplete The Executive Engineer P W D (B&R) and his team did remarkable work by removing these deficiencies within 3 months time July 8, 1968 will be recorded as another landmark in the progress of the University and this College when classes were held on the new campus of the University for the first time

The shifting of the college to the new campus resulted in accelerated progress in the building programme The main wing was completed during this year and laboratories in the basement floor of the North wing made significant progress during this year The building was inaugurated on March 27, 1969 by Mr John P Lewis, Minister-Director, USIAD Mission in India During this year Dr L O Drew, the first USAID Adviser to the Dean, College of Technology and Agricultural Engineering arrived to Assist the Dean Due to his consistent efforts and keen interest a sum of Rs 1 25 lacs was received from the U S A I D for Farm Power Laboratory under Trust Fund Project It was the first share of USAID contribution to establish and develop Agril Engineering Laboratories Dr L O Drew offered two courses during this year to the III year class He taught strength of Materials C E 302 and Farm Power A E 301 Two staff members were attached to Dr Drew to understand the working of Internal Grading system and teaching method

Shri N C Saxena, Lecturer left for the U S A in August 1968 under the USAID Programme as the first participant from this college Shri Y C Agarwal, Lecturer (the second participant though selected earlier), could not leave till May 1969 owing to certain difficulties

Six new staff members joined as Lecturers/Junior Lecturers as given below —

1 Shri J N Kaviraj
2 Shri S K Kanungo
3 Shri D K Gupta

4. Shri M.S. Acharya
5. Shri R. J. Nair
6. Shri D.N. Joshi, Foreman

Since the first batch of the Agricultural Engineering graduates from this college was expected to be out in May 1969, the Dean initiated correspondence with the Secretary, Agriculture Production, Government of Rajasthan and others for providing employment opportunities to these graduates. As a result of this, the Special Secretary to the Government of Rajasthan, Agri. Department issued a directive to the concerned departments for framing of service rules for the absorption of the Agricultural Engineering graduates.

During this year the ICAR agreed to the establishment of an Instrumentation Cell for the University at this College; a sum of Rs. 20,000/- was released for this purpose.

This College consists of the following four Departments:—

1. Soil and Water Conservation Engg. Department.
2. Farm Machinery and Farm Power and Processing Engineering.
3. Civil Engineering and Agri. Structures.
4. Mechanical and Electrical Department.

Teaching of Physics and Mathematics courses for the Agriculture wing at Udaipur is also the responsibility of this college. Three Lecturers in Mathematics and three in Physics are attached to the department of Mechanical and Civil Engg. respectively.

EXTENSION ACTIVITIES :

Two staff members (one Lecturer and one Junior Lecturer) were attached to the Directorate of Extension for extension activities in Agricultural Engineering. Unfortunately Extension programme in Agril. Engineering is not yet taken up. To make the best use of the staff it is desirable that the Directorate chalks out a programme for the whole year.

RESEARCH ACTIVITIES :

It is high time that the staff of this College be engaged in research activities. So far no grants have been, made available for departmental

research Under the students' projects, the staff members are required to assist the students for certain studies Such work cannot be considered as research activity

STAFF AT S K N COLLEGE OF AGRICULTURE, JOBNER

1 Shri M L Jain	M Sc Ag Engg	Head
2 Shri M T. Deshmukh	M Tech	Lecturer
3 Shri K D Singh	B Sc Ag Engg	Lecturer
4 Shri N K Babel	M Sc	Jr Lecturer

OTHER STAFF

1 Shri C S Mogra	—	Asstt Registrar
2 Shri V W Karnic	—	Asstt Librarian

The College also runs four workshops one housed in each of the following Colleges

1 College of Tech and Agri Engineering, Udaipur
2 Rajasthan College of Agriculture, Udaipur
3 School of Basic Sciences and Humanities, M B College
4 S K N College of Agriculture, Jobner

ADMISSION RULES

This college admits the students who pass the Higher Secondary Examination of the Board of Secondary Education, Rajasthan with Physics, Chemistry and Mathematics as optional subjects or an Examination declared equivalent there to provided the students obtain the minimum of 50% marks in aggregate of Physics, Chemistry and Mathematics group of the aforesaid examinations Admissions to the B E (Ag) course were made on merit as per University information bulletin

However, for State sponsored candidates only eligibility rules were approved Total number of Students admitted in the session was 196 —

Class	*Admission*	*State Nominees*
1st Year	28	16
2nd Year	42	7
3rd Year	40	2
4th Year	40	3
5th Year	46	2
	196	30

POST-GRADUATE :

This College offered the following Courses to Post-graduate M.Sc. Ag. Students of Dairy Science, Soil Conservation and Entomology at Udaipur Campus.

1.	Dairy Engineering	3 Cr.
2.	Hydrology	3 Cr.
3.	Soil and Water Conservation Engg.	3 Cr.
4.	Irrigation and Drainage Engg.	3 Cr.
5.	Plant Protection Equipment	3 Cr.
6.	Differential and Integral Calculus	5 Cr.

Eight students of M.Sc.Ag. majoring in Soil and Water Conservation also offered courses in Ag. Engg. Department of Jobner.

RESULTS :

Classwise result for the session is as under:—

	No. of Student Appeared	No. of Student Passed	Pass Percentage
Ist Year B.E. (Ag.)	28	19	67.85
IInd Year B.E. (Ag.)	42	42	100.00
IIIrd Year B.E. (Ag.)	40	40	100.00
IVth Year B.E (Ag.)	40	40	100.00
Vth Year B.E. (Ag.)	46	41	88.3

LIBRARY :

During the year 1968-69, 2860 books were added. Approximately a sum of one lac rupees was spent from the Non-recurring grant of the Indian Council of Agricultural Research. The total collection of Volumes was 3847 at the end of the year. This collection has strong representation of Agricultural Engineering, Science and Technology and other related books.

Twenty eight scientific and learned journals were added. Number of periodicals subscribed to by the end of the year rose to forty-five.

Following are the details of the Library facilities availed of by the readers:—

1.	Books issued	9,680
2.	Books consulted in the Library (Appx.)	5,500

3	Periodicals issued	103
4	Periodicals consulted in the Library (appx)	750
5	Number of attendance	14,870

During this year three staff members were added

STUDENT TEACHER RELATIONS

Under student Advisory system, regular contacts between the staff and the students are maintained However, because of lack of staff rooms the advisory system has not yet made its full impact

EXTRA CURRICULAR ACTIVITIES STUDENT WELFARE

The college games' council was formed in July, 1967 The following members of the staff were nominated as the members of this council for the session 1968 69

1	Mr K S Hiran	Chairman
2	Mr H V Verma	Vice Chairman
3	Mr T S Parmar	Secretary
4	Mr V S Rewatkar	Member

The following were captainist convenors of varions games —

		Captain	Convenor
1	Hockey	Mr S K Sani	Mr H V Verma
2	Basket ball	Mr A P Sahal	Mr CVAVB Raju
3	Volley ball	Mr C S Pathak	Mr A N Mathur
4	Badminton	Mr O P Jain	Mr S C Choudhary
5	Tennis	Mr R Mathok	Dr L O Drew
6	Table Tennis	Mr Samual Jose	Mr P C Ranka
7	Cricket	Mr A Vangani	Mr T S Parmar
8	Rifle Shooting	Mr J L Lohar	Mr K S Hiran
9	Aquatics	Mr H S Bhatti	Mr D K Mathur
10	Athletics	Mr J P Mishra	Mr L S Choudhary

HOUSE CAPTAINS

C V Raman House	Mr R A Jaiman
R N Tagore House	Mr S K Bhargava
T Vishevesariya House	Mr S Mehra
General Captain	Mr S Narang

Dr. John P. Lewis, Minister-Director USAID, New Delhi on 27th March, 1969.

The original plan of the building was estimated at Rs. 26 lacs. In the year 1968-69 nearly Rs. 19.50 lacs was utilised. Some modification was made in the original plan of the building. It was done in view of the serious consideration at Government level to transfer the Polytechnic college building to this College. In case the transfer does not materialise, we will be short of building and will require more funds for establishing our laboratories and equipments.

We have no hostel accommodation. Our students are sharing the hostel facilities with Polytechnic students and local students are residing with their parents. In future we hope the University will find its way to provide funds for this purpose.

Another need of this college is a swimming pool. Funds are also required for this purpose.

EQUIPMENT :

This college was started in 1964 and it is not yet well-equipped. Without equipment we are unable to develop Laboratories specially for Agricultural Engg. subjects. The budget provision for the year 1968-69 is as under:—

	Non-Plan	Plan	Total
Recurring	3,15,825/-	3,01,290/-	6,17,115/-
Non-Recurring	—	3,00,000/-	3,00,000/-

SCHOLARSHIPS :

The following scholarships were awarded to the students during the session:—

1. Merit Scholarships	24
2. Merit-cum-need	35
3. Study Loan	23
4. National Loan	9
5. National Scholarships	2
6. For Extraordinary Poverty	2
7. Political Sufferers	2
8. Freeships	3
9. Half freeships	7
10. From other states :	
1. Gujrat	1
2. Himachal Pd.	4
3. Delhi	2
11. I.C.A.R.	5
12. University	4
13. USAID	14

RESEARCH STUDIES, 1968 69

S No	Name of Adviser	Title of Project	Student Investigators
1	Shri J F Correia	1 Analysis of Precipitation Data	Govil, D, Mehta, D S
		2 "Design, Fabrication, Testing and installation of 'one foot' coshocton type, soil sampler"	Jaiman Ashutosh, Ranawat, N S
		3 Permeability in relation to other physical properties of soil	Khamesra, C G, Mathur, H P
		4 Study of cheap and efficient lining material for open channels	Lodha, N S, Bharagawa, S K
		5 Study of profil method of levelling and design of an Irrigation system	Javeria, S K, Kothari, B S
2	Shri K S Hiran	1 Design, Construction and installation of small size Runoff Plots	Mehra, Subhash, Mishra J P Saxena, S K, Singh, Bharat
		2 Performance of Sprinkler Irrigation system	Agarwal, D K, Jain, Om Prakash, Mehta, S M, Purohit, S M
		3 "Planning for soil conservation"	Mantri, Manmohan, Paliwal, R.

S. No. Name of Adviser	Title of Project	Student Investigators
3. Shri L.P. Singh	1. Development of Single row bullock drawn potato planter.	Narang, S.C. Raisinghani, K.V. Thareja, Ramsaran.
	2. Droplet size, pressure and discharge characteristics of row crop spray nozzles.	Aeron, Rakesh K. Modhok, Ramesh.
	3. Electric power distribution system on farm stead.	Babele, R. Singh Jain, Roshan Lal Pathak, C.S.
	4. Performance characteristics of two and four wheel walking and riding type small tractors.	Likhyani, S.K. Mehra H. Kumar Vanvaria, Ramesh.
4. Shri V.S. Rewatkar	1. Design and Fabrication of the Experimental set up for measuring draft of tillage Tools.	Khanna, S.K. Mantri, C.M. Mathur, P.
5. Shri M.L. Khandelwal	1. Design and fabrication of semi-portable cold storage.	Bhandari, D.S. Bhatnagar, R.N. Murdia, S.C.

S. No	Name of Adviser	Title of Project	Student Investigators
6.	*Shri* A N. Mathur	1. Design and testing of four stroke vertical single cylinder diesel engine.	Bhati, H S. Tak, M. Singh
7.	Shri D.K. Mathur &	1. Studies on design and fabrication *of grain storage* structures commnoly used in India.	Mathur, S.K. Nanawati, R.L. Purohit, S. Kumar.
	Shri V.P. Mittal	2. Survey of rural houses around *Udaipur city* and suggestions for improved houses.	Jain, Babu Lal Khimesra, P.K.

SOIL AND WATER CONSERVATION AND IRRIGATION SECTION

Advisor : J. F. Correia.

1. STUDY OF CHEAP AND EFFICIENT LINING MATERIAL FOR OPEN CHANNELS :

(N.S. Lodha and S.K. Bhargava)

Eleven channels section were constructed with admixtures of various materials and tested for seepage with constant device and ponding method. A comparison of cost and seepage loss from each section who wed a mixture of local china clay, cement mortar in the ratio of 9:5 to 1 when added with 78% commercially available accoproff cost 60 paise per square foot against 77 of bride and 99 of concrete, the seepage loss from it was much less comparatively.

2. A STUDY OF PROFILE METHOD OF LEVELLING AND DESIGN OF IRRIGATION SYSTEM :

(B.S. Kothari and V.K.B. Javeria)

A model representing a field surveyed for land levelling and irrigation was prepared. This model gives a three dimensional view of the relief of the land. Cost feasibility analysis indicated that sprinkler system of irrigation was more economical than the land levelling needed for surface irrigation. A complete sprinkler design was prepared for a small-sized model farm.

3. DESIGN FABRICATION TESTING AND INSTALLATION OF ONE-FOOD COSHOCTION TYPE SOIL SAMPLER :

(N.S. Ranawat and Asutosh Jaiman)

A Conshoction type sampler one foot size was designed fabricated and tested in a laboratory tilting flume with the help of a six inch H-flume. Tests of silt sampling at 0.5, 1.0 and 1·5 per cent indicated a very low percentage of error. The sampler is suitable for field experiments in small watershed for low soil loss.

4. ANALYSIS OF PRECIPITATION DATA :

(D.K. Govil and D.S. Mehta)

The rainfall data for nine years, from 1960 to 1968 available from Rajasthan College of Agriculture, Udaipur was analysed for rainfall intensities and storm patterns and predictions were made for certain rainfall

haracteristics The data for 1968 was available from self recording aingauge Based on these studies, recommendations for protective vegetation against soil erosion and time of sowing were made

ↄ PERMEABILITY IN RELATION TO OTHER PHYSICAL PROPERTIES OF SOIL

(H P Mathur and C S Khamesra)

Studies on hydraulic conductivity of five major representative soils of Udaipur were conducted to study the relationship between it and other physical properties of soil It was found that hydraulic conductivity varied inversely as the bulk density and clay content and directly as the silt content It decreased as the void ration and inorease as the pore space percentage for the types of soils under study

6 PERFORMANCE OF SPRINKLER IRRIGATION SYSTEM

Adviser K S Hiran

(Agarwal, D K , Jain, Om Prakash, Mehta, S M , Purohit S K)

In this Project an attempt was made to analyse the effects of variables like wind velocity, height of riser and size of nozzle on water distribution pattern by sprinklers It was concluded that high wind velocity results in poor distribution pattern of water, shorter riser gave better distribution whereas the effect of size of nozzle was found not significant

7 PLANNING FOR SOIL CONSERVATION

(Mantri, Mamohan, Paliwal, R)

A detailed investigation was carried out for about 18 hectares of land at the University Research Farm, Vallabhnagar The area was surveyed in order to find out the general topography and the physical characteristics of the soil Suitable conservation measures and water control structures were designed and proposed

8 DESIGN CONSTRUCTION AND INSTALLATION OF SMALL SIZE RUNOFF PLOTS

(Mehra, Subhash, Mishra J P , Saxena, S K , Singh, Bharat)

6 Small size runoff plots (72 6 X 6) with slope of 9% were designed and constructed at the University Research Farm, Vallabhanagar for a

frequency of 25 years which can be later used to study the effectiveness of different covers in order to calculate the soil loss, 5-slit (multislot) divisor was fabricated and installed, together with sludger tank and aliquot tank.

FARM MACHINERY AND POWER SECTION

I. PERFORMANCE CHARACTERISTICS OF TWO AND FOUR WHEEL WALKING AND RIDING TYPE SMALL TRACTORS :

Adviser : L.P. Singh

(Likhyani, S.K.; Mehra, H. Kumar; Vanvaria Ramesh)

1. Studies were conducted to find the torqe developed, brake horsepower, air fuel ratio and specific fuel consumption of the engines.

The engine performance, wheel shaft power and the drawnbar test of Krishi, Beaver and David Bradley tractors were made and tests revealed the following facts:—

(1) Maximum brake horsepower developed by Krishi Engine was 5.05 at 1400 at r.p.m. The specific fuel consumption was 0.208 Kg/hp.hr. and air fuel ratio was 14.3. The torque developed was 2.62 kg.M.

(2) Maximum brake horsepower developed by Wisconsin engine (in David Bradley) was 5.15 at 3200 r.p.m. The specific fuel consumption was 0.221 kg/hp.hr. and air fuel ratio was 15.92. The torque developed was 1.15 Kg./M.

(3) The maximum drawbar horsepower developed by Krishi tractor was 1.32, in IIIrd Gear. The speed was 3.05 km.hr. and pull of 150 kg. The tractive efficiency was 0.71 and co-efficient of traction 0.50.

(4) Beaver tractor developed drawbar horsepower of 1.802 at speed of 3.17 k.m./hr. in high gear, with a pull of 155 kg. The slip at this pull was 21.4% tractive efficiency 0.89 and co-efficient of traction 1.24.

(5) David Bradley Tractor developed drawbar horsepower f.520 at a speed of 2.72 km./hr. and pull of 150 kg. The slip at this pull was 16.2%, tractive efficiency 0.82 and co-efficient of traction 0.83.

DEVELOPMENT OF SINGLE ROW, BULLOCK DRAWN POTATO PLANTER .

(Narang, S C , Raisinghani, K V , Thareja, Ramsaran)

A Bullock drawn potato planter was designed, fabricated and tested with a pair of bullocks It is provided with a non positive transmission system which transmits the power from ground wheel to picker wheel shaft This machine is equipped with a mechanical picking device which drops the seeds at regular interval in a row Two reversible mouldboard, shaped to form a ridge are attached behind, which cover the seed, this bridge Adjustments have been provided to regulate the depth of planting and size of ridge The machine can be operated in the field for 6 hours without re filling the hopper

The testing of the machine was done, which gave quite encouraging resulls It was found that the machine could operate well under average field conditions requiring 0 6 to 0 7 hp The initial cost of about Rs 500/- to 1000/- (though high) is expected to be nullified-by saving in labour, low cost of operation and ease of handling

DROPLET SIZE PRESSURE AND DISCHARGE CHARACTERISTICS OF ROW CROP SPRAY NOZZLES

A test setup, in conformity with the problem, was designed and fabricated The apparatus consists of a sprayo graph, method of collecting a spray sample undistorted and a method of measuring droplet size Sprayograph was used to take unbiased samples of spray from the two type of nozzles in study viz (1) The flat fan and (2) The solid-cone A colour spray was used by adding methyl violet 6 B dye to the water The moving slit of the sprayograph in acted the manner of a focal plane camera shutter producing snaphots of the instantanecous discharge of the nozzle

A soft surface was prepared for the use by mixing 67% vasel in and 32 8% of liquid paraffin by weight A layer of this mix about 3 mm thick was used in catching droplets

Two random spots were chosen in each sample and droplets in that area measured The pressure range was between 1 406 to 6 68 kg [illegible] (*20 to 95 PSI*) for both the nozzles

The following conclusions were made:—

1. Wide pariation in drop sizes was observed in all samples, but maximum number of drops were in smaller size range.

2. Atomization increased with an increase in pressure.

3. Emission rate increased with increase in pressure.

DESIGN AND FABRICATION OF THE EXPERIMENTAL SET UP FOR MEASURING DRAFT OF TILLAGE TOOLS :

Adviser : V.S. Rewatkar

(Khanna, S.K.; Mantri, C.M.; Mathur O.P.)

Draft governs the design of tillage tools and is affected by variables as : Soils and Implements. An experimental set up was designed and studies were conducted in the laboratory by simulating field conditions, on the draft requirement under different conditions. The set up consisss of (a) Soil bin (b) A moving trolly (c) a transmission mechanism capable of providing different speeds desired in the tests and (d) Automatic recording device.

The procedure for testing a tillage tool was followed in the sequence of irrigating the soil, levelling and compacting the soil, munting the tillage tool on tool bar and finally moving the trolly for testing. Readings were taken directly by spring dynamometer. Use of strain gauge is also made in draft measurements of cultivator type.

Effects of speed, moisture content, detph of penetration and degree of compaction have been studied with respect to draft requirements. Results of studies are summarised as—

(a) Draft of tillage tools increases as the speed is increased. The increase in draft is rapid below the speeds of 1.00 mph.

(b) Draft is reduced if moisture content of the soil is more.

(c) Total draft is unchanged though unit draft varies inversly with the depth.

(d) Draft increased as the degree of compaction is increased (because of increased bulk density of soil mass.)

DESIGN AND FABRICATION OF SEMIPORTABLE COLD STORAGE

Adviser M L Khandelwal

(D S Bhandari, R N Bhatnagar, S C Murdia)

The problem of preserving foods, vegatebles and other perishable products is becoming of increasing importance in our country A simple and efficient cold storage unit of 1 1 cumeter (40 5 cuft) storing capacity was designed and developed using pilking for fibre glass, plywood aluminium sheet and teak wood The main components of this unit are compresser, 3/4 H P with suitable Electric Motor, condenser, receiver thermostate etc , provision of three cabinets have been made for storing different commodities at temperature varying from 3°C to 10°C The cost of such cold storage comes to about Rs 6000 00 The unit is yet to be tested for its performance

DESIGN AND TESTING OF FOUR STROKE VERTICAL SINGLE CYLINDER DIESEL ENGINE

Adviser A N Mathur

(M S Tak and H S Bhati)

The study was carried on a single cylinder vertical four stroke cycle diesel engine in order to find and compare the characteristics of a particular make

The design criteria of an engine involve selection of engine horse power for specific use, material of various components, type of stress and force involved in mechanism, type of cooling, lubricating and supply systems etc

The experiment yielded the following results

1 The specific fuel consumption of that diesel engine was found to be 0 36 Lb/B hp/Hr as against the standard rating of 0 44 Lb/B hp-Hr The engine was not developing rated h p due to increased cylinder bore and also it was quite old The measuring units for each trials were less and it may invole some errors in recording fuel consumption

2 The best speed of the engine was observed to be 1500 RPM when switched on a constant load

AN ELECTRIC POWER DISTRIBUTION SYSTEM ON FARM STEAD :

(Bable, R. Singh; Jain, Roshan Lal; Pathak, C.S.)

The project 'An Electric Power Distribution system on Farm Stead' was conducted with a view to promoting an ideal distribution for economic, efficient use of electric power. The load survey and preliminary land survey were conducted to determine the load concentrations and load centres.

The wire sizes for various feeder lines were selected taking in view the distance between load centres and various buildings as well as power consumptions in those buildings. The voltage drop and current rating were the guiding factors for the wire size. Mechanical design of poles and guys was also done.

A model of the whole system on reduced scale and loads was fabricated. The loads were represented by the lamp-loads, equivalent to the reduced loads. The consumption of the whole system was obtained by a meter installed with the model.

The following conclusions were made:—

1. As the distance between the load concentration point in building and the distribution centre increases the pressure drop also increases and as such the flow of current too. Therefore, if, the wire size is not properly selected the whole system may fail.

2. The location of the load concentration points affects the wire sizes a lot and ultimately the erection cost.

3. The radial system is not applicable perfectly in case of very big localities owing to the difficulty of road lights.

4. The number of poles increases if the structures are spread more than 200 ft. radius from distribution centre.

5. The aluminium conductors are economical to use in farm stead distribution system.

6. As the wire size increases the required pole size also increases.

7. As the span increases, the required pole heigh also increases due to excessive sag.

CIVIL ENGINEERING & AGRI. STRUCTURES SECTION

Adviser Shri D K Mathur and V P Mittal

SURVEY OF RURAL HOUSES AROUND UDAIPUR CITY AND SUGGESTIONS FOR IMPROVED HOUSES

(Jain, Babu Lal , Khimesra, P K)

This project was undertaken with a view to assessing the existing housing situation in villages located in the vicinity of Udaipur city and bringing about positive recommendations for better housing development plans taking into account type of construction, designing and cost It was felt that the findings of this micro-study of four villages may serve as guideline for gradual adoption and implementation on a wider level

A residential building, costing Rs 104 07 per sq m made from good material with reasonable sanitary and hygienic conditions, having adequate space for living, storage and cattleshed suitable for this region was recommended

STUDIES ON DESIGN AND FABRICATION OF GRAIN STORAGE STRUCTURES COMMONLY USED IN INDIA

(Mathur S K Nanawati, R L , Purohit, S Kumar)

This project was undertaken to compile the design and fabrication features of various types of storage structures commonly used in India, to collect the information regarding the existing grain storage practices in village near Udaipur and to develop a structure suitable for storing maize and wheat, the staple food crops of this region

The study revealed that the grains are stored either by cultivators, traders or by ware housing agencies in different shapes and sizes of structure—earthen pots, wooden, metallic and concrete bins and khattis These structures are located underground, on the ground and above the ground The losses from the indigenous structures are substantial due to insects, rodents, moisture migrations etc and they need modifications to minimise the losses

The cultivators of Udaipur region, on an average, retain f of the crop produced, in the indoor structures, having capacity 7 2 quintals, in mud pots, jute bags, kutcha or pucca kothis, drums and cement tank Out of these, kothi is the most

to ease of construction and cheapness. The period of storage varies from one month to a year. These structures Containers, ecocpting the tin drum were not rodent proof and tend to develop plenty of cracks and crevices which invariably harbour the *insects responsible for the infestation.*

The defects of *kothi*-type structures were minimised by developing a structure in which the grain was put in poly thene bag, surrounded by jute covering, placed in circular steel frame, covered by mud plaster in such a manner that an air film was maintained. The structure was embedded in brick masonry, plastered with cement mortar and an outlet was provided at the base of the structure.

V. COLLEGE OF VETERINARY & ANIMAL SCIENCE, BIKANER

1. Admission rules :

(A) Under-graduate :	Inter Science, 1st year T.D.C. with Science (Biology) or Pre-Professional Part. I and II or its equivalent (with minimum marks of 45%).
(B) Post-graduate :	B.V.Sc. and A.H. Examination or an examination declared equivalent with 2.5 out of 4 point scale or 50% marks for those students, who have passed under traditional system.
(C) Ph.D.	Must be M.V.Sc. (1st or 2nd Division).

2. Library :

(A) No. of Journals	78
(B) No. of Books	12,382
(C) No. of books issued and deposited in the year.	18,018

3 Student Teacher relation	Very cordial
4 Extra curricular activities—Student Welfare	Our students participated in the University tournament which were organised by the University of Udaipur and they staged the Drama "PHAGALKANA", which was very much appreciated by the audience
5 Other notable distinctions	Mr N K Dwivedi stood first in the debate competition which was organised by the Agricultural Engineering College, Udaipur
6 Miscellaneous	Our students also participated in the competitive examination of I C A R fellowship and two of them stood first In addition to this one foreign student was also enrolled for P G Class it Bacteriology

VI SCHOOL OF BASIC SCIENCES AND HUMANITIES (M B COLLEGE, UDAIPUR)

1 STUDENT-TEACHER RELATIONS

During the session a number of academic and extramural activities were organised with the active cooperation of students and teachers of this college Students besides showing their keen interest, enthusiasm and discipline, also successfully mustered support of their teachers to make these activities a success

The College students Union and the Committees of students also worked in this respect

2 EXTRA-CURRICULAR ACTIVITIES—STUDENT WELFARE

(A) An Orientation prog prepared by Shri J G Massey Adviser, Students Advisory Bureau (according to the schedule

arranged with the help of some sympathetic teachers and senior students in the beginning of the session at this college to guide and help the new-comers in acquainting themselves with the library system and the activities of this college.

(B) The College ran a students' Advisory Bureau to help students in the choice of a career. Mr. Massey, Adviser helped students in seeking jobs and part-time work as Guide and Tutor during this session.

(C) A students' Aid Fund is formed by a voluntary subscription of Re. 1/- per year from the students of this college and a contribution of Rs. 2,000/- per annum from the U.G.C. The object of the fund is to render assistance to poor students to meet their tuition or examination fee or expenses on books or some other similar expenses. The Fund is administered by the Director through the assistance of a duly constituted Committee.

3. LIBRARY :

(a) The Library is run on the open—access system and is divided into two sections—one lending and another non-lending. There are facilities for 250 persons to sit and work at a time.

(b) It has the following number of volumes and journals :

Number of Volumes	48,045
Number of current Periodicals	360

(c) The College Library is being used and consulted by all the members of the teaching staff and the students of this college and other colleges of the city. The following figures will give an idea of the number of books issued and consulted :

Issued	: 35,365
Consulted	: 39,213

4. OTHER NOTABLE DISTINCTIONS :

(A) The following activities were undertaken under the direction of Dr. C.M. Jain, in-charge, N.S.C. during the session 1968-69—

1. Ran the Adult Literacy centre at two places—

(i) M.B. College (ii) Gandharv Sanskrit Mahavidyalaya, Surajpole, Udaipur.

2 Library service at M B College, Udaipur

3 Shramdan in the College campus including the College Hostel area

4 Checked Ticketless Travellers at the City Station, Udaipur

5 Collection of Old Books and Literature

6 Sent a batch of students to 'Antar Bharatiya' Somnath, Maharashtra

(B) PROJECTS/SEMINARS

1 A summer institute in Physics was organised by the Department of Physics under the U G C grant to train science teachers of the secondary and Higher Secondary Schools

2 "Research Project on History of Mewar under the direction of Shri B S Mathur is still in progress under the U G C grant

3 A Seminar on 'Principles of Literary Criticism in Sanskrit' under the direction of Dr R C Dwivedi, and sponsored by the U G C grant was organised by the Department of Sanskrit at this college in the month of December 1968

N B –Reports of Seminars/Projects undertaken by the Departments have been given in the departmental reports

(C) GAMES AND SPORTS

The College was awarded General Championship in Games and Sports at the Inter Collegiate Tournaments The College participated as usual in the University Inter-Collegiate Tournaments both for men and women for the session 1968 69 The college distinguished itself in these tournaments as shown below

Boys	Badminton	Winner
	Table tennis	Winner
	Tennis	Winner
	Hockey	Winner
	Volley ball	Winner
Girls	Basketball	Winner

(D) Extension blocks consisting of one laboratory room and one Professor's room have been added to the Department of Physics and Chemistry each

VII. UDAIPUR SCHOOL OF SOCIAL WORK RAJASTHAN VIDYAPEETH, UDAIPUR

The academic session of the school for 1968-69 commenced on 8th July, 1968 with the starting of the M.A. Final class. M.A. Previous class started on 29th July, 1968.

ENROLMENT :

Eighteen students were admitted to the M.A. Previous class for the session 1968-69 and there were 30 students in M.A. Final class. One student dropped out in the middle of the session from each class bringing the net strength to 17 and 29 respectively. Students came from different parts of India for admission to the School. Out of 46 students at present, 43 are men and 3 women. Among these there were three trainee officers on deputation of the Social Welfare Department, Rajasthan, one in M.A. Final and two in M.A. Previous.

1969 EXAMINATION RESULTS :

The School had very good results for both the M.A. Final and Previous Examination of 1969 with only one student failing in each class. In M.A. Final Examination all but one out of the 29 students, who appeared passed, 1 in the I Division, 20 in the second Division and 7 in the III Division.

IMPORTANT EVENTS IN THE SCHOOL :

1. On 14th August, 1968, Shri Janardan Rai Nagar, Upkulpati Rajasthan Vidyapeeth delivered the commencement address.

2. On 24th August, 1968 the Students' Union of the school was inaugurated by Shri Tej Singh Mehta, Precheta, Rajasthan Vidyapeeth in the absence of Shri B.N. Joshi, Minister of State for Social Welfare and Finance, Rajasthan who could not come due to sudden indisposition. Shri Parmanand Sharma, the Director of Social Welfare, Rajasthan also addressed the students.

3. On 30th August, students of the School who were placed for field work at the Bedla Community Centre, organised an inter-agency cultural programme.

4 Shri A B Shah, Director of the International Association for Cultural Freedom addressed the staff and students of the School on 13th November

5 The 20th Anniversary of the Universal Declaration of Human Rights was celebrated in the School on 10th Dec 1968 Shri B G Tiwari, Principal, Lokmanya Tilak Teachers Training College, Dabok was the Guest Speaker at the meeting

6 On 28th January, 1969 a reception was held in the school in honour of old students who had come to Udaipur to receive their degrees at the University Convocation

7 The Annual day of the School was celebrated on 10th March, 1969 Shri Bhim Sen, Director M B College, was the Chief Guest and Shri J R Nagar, Upkulpati, Rajasthan Vidyapeeth presided over the function Among the prominent people who attended the function were Dr G S Mahajani, Vice Chancellor, Udaipur University and Mrs Mahajani Function was followed by a dinner in honour of the Guest

8 On 20th March, 1969 the School celebrated the social welfare day A symposium to mark the celebration was held on the theme of the year 'The welfare of the Aged' Dr Shoorveer Singh, P M O of the General Hospital inaugurated the symposium Dr M S Gambhir of the R N T Medical college, Shri N L Bordia, Asstt Director of the social welfare Department of the Government of Rajasthan, Udaipur and Shri R R Singh, Lecturer of the school read papers

9 On 12th April, 1969 the staff and students of the School arranged a party to bid farewell to Dr P T Thomas, Principal and Shri A V Ranade, Lecturer

SHORT TERM COURSE

The School had to its credit the starting of a two month inservice training course in Criminology and Correctional Administration for the officers of the Social Welfare and Police department of the Government of Rajasthan during the year 1968 69 The first course was successfully conducted from 1st November to 30th December, 1968 and was attended by five officers of the Social Welfare Department and one officer of

the Police Department. The course was formally inaugurated by Shri Haribhauji Upadhyaya, Kulpati, Rajasthan Vidyapeeth on 2nd November. The closing function of the Course was held in the School on 28th December to award certificates to the trainees on the successful completion of their training. Shri Heeralal Devpura, Minister of state for Home and Public Relations, Government of Rajasthan was the Chief Guest. The Minister awarded the certificates to the trainees. It is planned to have repetition of the course at least once a year.

Besides this course, the school has also designed the following two short term courses :

1. Inservice Training course in Scool of Social work for the Primary and Middle school teachers.

2. Course in Rural service for the students of the school.

RESEARCH PROJECTS :

The following special research projects have been planned by the Research Department of the School during the year 1968-69 :

1. problems of the Aged in Rajasthan. This scheme has been submitted to the U.S. Department of Health, Education and Welfare for grant of necessary financial assistance.

2. Study of Tribal Belt in Rajasthan. This scheme has been submitted to the Indian Council of Social Welfare.

3. Industrial Labour and Personnel Management in Rajasthan Coordination of students' Research Project.

LIBRARY :

The School Library which functions on open access system for encouraging reading habits among students, has at present about 3800 volumes pertaining to the subjects of instruction in the school & subscribes to about 80 professional and other journals. We have also established a Text Book Library with the help of grants from the University-Grants Commission.

U G C GRANTS

It is a matter of pleasure that the University Grants Commission has given approval to the provision of non-recurring grants of Rs 85,000/- for the development of post graduate studies in Humanities and Social Sciences in the school during the Fourth Five Year Plan The grant has been sanctioned for the purchase of books, furniture, station wagon, equipment and Audio-Visual Aids During the year under report school has utilised the U G C grant to the extent of Rs 14,491 34

Thus the school has made fairly good progress in almost all directions Out of the 196 students who passed out from the school until 1968, more than 50% of them are employed in good occupations in the fields of social and Labour Welfare in the country

VIII VIDYA BHAWAN RURAL INSTITUTE, UDAIPUR

The Vidya Bhawan Rural Institute was established in 1956 and started its venture with the following first two courses —

1 Three year Rural services Diploma course which was equivalent to the first degree course of Indian Universities

2 The Three Year civil and Rural Engineering Diploma course

3 In 1960 the Institute started its one year course for sanitary Inspectors

4 In 1963 the Post Graduate course in Rural Sociology and community Development was introduced

5 In February, 1965, the Training cum Production centre in carpentary was started In this centre the students work in carpentary on a part time basis and earn some money while they receive their education at the Rural Institute This year the students could not work because of very poor enrolment in the First Year classes and closure of the sanitary Inspectors' course

In December 1965, the Institute s Rural services course was affiliated to the University of Udaipur Now the students get the B A degree of this University instead of the Rural services Diploma and the M A Degree

in Rural sociology instead of the Post Graduate Diploma in sociology and community Devclopment. For the degree course in the Institute community development and extension is a compulsory subject while cooperation is one of the optional subjects. In this way the syllabus for the B.A. Course is almost the same as that which had been prescribed by the National council for Rural Higher Educat on, Ministry of Education, Government of India.

In 1967-68, the Institute started the Pre-University and three year degree courses in science. In these courses the students can offer either Ma thematics or Biology with Physics and Chemistry. In this course also Community Development and Extension is a compulsory qualifying subject.

The strength of the students in the post-graduate courses was as fo llows:—

1. M. A. (Prev.) Rural Sociology	—	14
2. M. A. (Final) ,,	—	5

CLASSWISE BREAK-UP OF RESULTS IN 1968-69

Name of Courses	No of Students Appeared	No of Students Passed	DIVISION I	DIVISION II	DIVISION III	Pass percentage	Regulation
RURAL SERVICES DEPARTMENT							
1 M A (Prev)	8	8	—	—	—	100%	
2 M A (Final)	5	5	—	4	1	100%	
3 I Year TDC Arts	7	7	—	—	—	100%	
4 II ,, ,, ,,	20	19	—	—	—	95%	
5 III ,, ,, ,,	3	3	—	2	1	100%	
6 II ,, ,, Science	15	7	—	—	—	46 6%	
7 I ,, ,, ,,	73	18	—	—	—	24 6%	
8 Pre-University Science	26	15	3	8	4	57 6%	
CIVIL & RURAL ENGINEERING DEPARTMENT							
1 III Year Civil Engg	22	11	4	7	—	52 4% Result withheld 10	1
2 II year Civil Engg	22	14	—	—	—	77 3%	3
3 I Year Civil Engg	12	5	—	—	—	75%	4

The One-Year Sanitary Inspectors' Course was discontinued from this academic session, as the Government of Rajasthan expressed its inability to provide grant-in-aid for this purpose. The Government was also of the view that this course was not necessary at this time since there was no demand of the Sanitary Inspectors, There being already a surplus of such personnel in the State.

Shri K. L. Bordia, Director of the Institute since its inception in 1956, Retired on 4th May, 1967, from the service of the Vidya Bhawan Society. The students and the members of the staff record their gratefulness to Shri K. L. Bordia for his devoted service to the institution.

Shri K. N. Shrivastava, Deputy Director, Vidya Bhawan Rural Institute was appointed as officiating Director with effect from 30th May, 1968. He was later appointed as Director of the Institute from 25th January, 1969, having been selected by a Committee constituted for the purpose by the Ministry of Education, Government of India.

The Department of Physics was expanded and accommodated in the building of the Sanitary Inspectors' Course. The Department of Botany and Zoology were accommodated in the P.R.T.C. building which was available with the Institute after the discontinuance of the Panchayat Training Courses.

A programme of campus improvement was taken up under which a spacious lawn was laid in a vacant space in front of the Department of Civil Engineering. Some minor improvements were made at the main road of the Institute cycle stand and the space in front of the Department of Rural services.

GROUP SYSTEM :

In order to give individual attention each student and to counsel them in their academic and other activities, the Rural Institute maintained the Group System. In both the departments the students were divided into small groups under the charge of 2 or 3 lecturers each. During the course of the year almost all the groups met fortnightly to discuss their problems. All the groups also organised from time to time hikes, overnight camps, socials etc.

There were 18 staff members in Arts and Science in the Department of Rural services The following were new additions in the staff during the session —

1 Dr H B Maloo	—	Lect in Mathematics
2 Shri H K Yagnik	—	Lect in Physics
3 Shri L K Dadeech	—	Lect in Botany
4 Shri D B McFarland	—	Lect in English
5 Miss G Saklani	—	Lect in Sociology

Shri R N Tewari was appointed Reader in Economics with effect from the 9th November, 1968

There were 12 members of the staff in the Department of Civil Engineering There were no new additions in the staff

PARTICIPATION IN CONFERENCES

The following members of the staff attended professional Conferences mentioned against their names —

1 Shri P L Pareek	All India Adult Education Conference and National Seminar on Adult Education and Parliamentary Democracy held in Pondicherry
2 Shri R N Tewari	(a) Seminar "Research Needs of Agro Economic Industries in India" organised by the Indian Society of Agricultural Economics held at Bombay
	(b) Second Annual Conference of the Rajasthan Economics Association held at Jaipur
3 Shri M L Dungarwal	Second Annual Conference of the Rajasthan Economics Association held at Jaipur

CIVIL ENGINEERING DEPARTMENT :

The National Council for Rural Higher Education Scheme was dropped for the Final Year Examination for the first time during this session and the final examination at the III Year level, for Diploma in Civil and Rural Engineering was followed.

Since 1967-68, the Board of Technical Education, Rajasthan to which our Institute is affiliated for the Diploma in Civil and Rural Engineering, started the two-semester system of examination with Hindi as the medium of teaching and examination. Thus the First and Second Year classes were according to the new scheme of semester system with Hindi medium and the III Year was according to the old scheme of the Board (One examination at the end of the session) with English medium. Efforts are being made to procure books in Hindi on Engineering subjects.

Although the Institute has got its affiliation with the Board of Technical Education, Rajasthan, since July, 1966, for this Diploma in Civil and Rural Engineering, the Department is maintaining its characteristics for fulfilling the objectives of the National Council with which this course was started in 1956. The Department continues to undertake the surveys, preparation of plans and estimates for the nearby villages and to appraise the students of the village problems and their solutions; guidance to the villagers in solving their standing problems like housing, irrigation and sanitation etc. is also imparted.

The third year students went out on an educational tour for 18 days towards south with two members of the staff.

This year the following projects were taken up under the extension programme:—

1. Survey and preparation of plans and estimates for the road from Lohera to Kavitha—2 miles.

2. Demarcation and measurement of areas of pasture lands in the R.I. campus.

3. Preparation of plans for the Vidya Bhawan Handicrafts Institute Hostels.

Apart from this the students of II Year and III Year were taken on rounds to the surrounding villages to appraise them of the village problems of the farmers and villagers

LIBRARY AND READING ROOM

There are more than 16,000 volumes in the Institute Library at present An amount of Rs 1,65,000/- has been spent on the library so far The Institute Reading Room subscribes to about 85 magazines, journals and newspapers The library was suffering from want of space and, therefore, one more class room was added to the library The library is now accommodated in four class rooms The library itself and the pressure of accommodation in the Department of Rural Services desires that the library building be completed as early as possible

HOSTEL

The Institute hostels have an accommodation for 200 students There were 100 students in the hostels in the year under review

EXTENSION DEPARTMENT

Extension work is the most important activity of the Institute. The facilities available at the Institute are used for village development work. All the departments of the Institute contribute to this work. This year the Extension Department took up the following activities in hand—

1 An incentive use of insecticides and [illegible] was made in the form of two hundred farmers

2 Pyrella control campaign was started in the [illegible] four villages —

1 Manpura — 2 [illegible]

3 Lohera — 4 [illegible]

101 bighas of sugarcane [illegible]

3 98 Soil samples were [illegible]

4 Through the [illegible] 5 quintals [illegible] distributed

5. Guidance in purchasing and installing pumping sets was given to the farmers. Eleven such pumping sets were purchased and installed on wells of the farmers.

6. The department imparted training to 250 farmers for the Kharif crop and fifty two farmers for the Rabi crop.

7. Guidance was given to five Youth Clubs in preparing their annual plans.

8. Film shows were organised, numbering about 37 and nearly 18,000 people witnessed the shows.

APPLIED NUTRITION :

Vegetables were grown by 66 young farmers in Kharif season and by 60 young farmers in Rabi and 60 young farmers grew Ziad vegetables.

200 Papita plants and 100 Guava plants were distributed free of charge.

In five villages training was imparted to 100 farm families in growing and using vegetables.

Leaflets for preparing orange squash & tomato catch up were cyclostyled for distribution. Leaflets for Guava cultivation and its use were also published. A chart of growing vegetables was also prepared and distributed among villagers.

PLANNING FORUM :

The Vidya Bhawan Rural Institute Planning forum continued to function this year under the charge of Shri R. N. Tewari, Reader in Economics. The formal membership of the forum was 66. As usual the Forum received a grant of Rs. 10,000/- from the Government during the year. The activities of the forum were as follows:—

1. SURVEY IN RURAL PROJECT :

Research study based on Farm Accounting method entitled (a) Occupational profitability in the adopted villages, (b) The small farm econony and (c) Economics of High Yielding Wheat varieties based on Demonstration-cum-field trials.

2 PLAN PUBLICITY & CELEBRATION OF NATIONAL PLAN WEEK

(a) Undertook publicity work on "Small Family form 10th January to 26th January, 1969 In this fortnight, through the cooperation of District Family planning office and Field Publicity office (Government of India) exhibitions, cultural programmes and Cinema shows were arranged in the villages and at the Institute The Central Drama Troupe (Ministry of Information and Broadcasting, Government of India) performed the show ' Kathaghar The theme of *family Planning* and *its* presentation deserves all praise It gave two performances on the 19th and 20th January, 1969 More than 400 people witnessed the shows

(b) Village sports and games village symposiums, agricultural exhibition alongwith other educational competitions were organised from 18th March to 24th March, 1969 The villagers made these meets and programmes successful by attending in large numbers

3 DEBATES, SEMINAR & SYMPOSIUM

1 Symposium

A symposium was held on "Role of students in the Planned Developmet af the Rural sector

About 40 students participated in the discussion Members of the teaching staff also contributed valuable suggestions and ideas

2 Paper Reading

(a) Marxian ideology and its changing facets

(b) South India–My impressions

4 EDUCATIONAL CLASSES FOR ADULT & POOR CHILDREN AND SOCIAL SERVICES

A Plan information com community centre was established in Siyalpura fully equipped with sitting arrangements, radio, books, newspapers and other useful reading literature It has been planned to raise this centre into a continuing educational centre Film shows were also arranged for the village folk on Social Economic issues and agricultural problems on many occasions

5. EDUCATIONAL TRIPS :

The students undertook two educational tours, (i) to South India and (ii) to Zawar Mines.

6. COMMUNITY DEVELOPMENT WORK & SOCIAL PROJECTS :

The forum undertook on a very modest scale to solve the bottlenecks in the supply of fertilizers and seeds and to make available Plant Protection Services. At times it took direct supply of inputs paid for by the beneficiaries. Liasion work with the Governmental agencies is a regular feature. Thus the Forum helped in making available the following services :—

Items	Quty. in Quintals	No. of farmers
Fertilizers	47	200
Improved Seeds	5	224

7. PLANT PROTECTION :

Spraying work on 167 bighas was done through the Forum Field man. In case the area was suffering acutely with unidentifiable diseases, the agricultural experts in the University were consulted for this purpose.

Field advisory and training programme with the active cooperation of the staff in the Institute and other local institutions were arranged. In the current year 279 cultivators were trained in High Yielding varieties of the cultivation of maize and wheat through peripatetic training programme. About 1800 farmers were informed about the new seed and improved techniques of cultivation specially suited to the region. Bulletins, specially to suit the purpose were distributed among these farmers and film shows were arranged. Some of these farmers were given intensive training and were also taken to visit National Demonstration Farms and the farm of the Institute which now specializes in raising dwarf varieties.

These programmes were followed up by group discussions to ascertain their views, problems and reservations.

8 RESEARCH DEPARTMENT

The Research Department undertakes study projects which are concerned with the immediate and important problems in the area The following research studies were taken up at the Institute

TITLE OF THE STUDY	SPONSORING AGENCY
1 Drinking and Prohibition in Rajasthan A Comparative study	Rajasthan Nasha Bandi Samiti, Jaipur
2 Economics of High Yielding Wheat Varieties—An Experimental study	Planning Commission, Govt of India, Panchayat & Development Department, Rajasthan & Research Deptt Vidya Bhawan Rural Institute
3 Techniques of Fertilizing and their-effect on productivity	
4 *Small Farm Economy* with special reference to the service Area of Vidya Bhawan Rural Institute	*Research Department,* Vidya Bhawan Rural Institute
5 Manpower Utilization in the service area A Comparative study	
6 Cooperation and its Role in Agricultural Production with special reference to High Yielding varieties	University Grant Commission, India

9 N C C ACTIVITIES

The Academic Council unanimously decided to continue the N C C scheme, for the students of the Institute During the session 134 cadet-students were enrolled The average attendance of the cadets on parades was 86%, which was the highest in the whole battalion Not a single student was detained on account of shortage of attendance 103 boys participated in the Annual Training camp held at Kherwara The Institute

contingent adjudged all round best. 10 cadets helped the Civil authorities in maintaining law and order during the general strike called by the Central Government employees on the 19th September, 1969. 53 and 3 cadets appeared in the "B" and "C" certificate examinations respectively. Considering all aspects, the N.C.C. activities were quite satisfactory.

10. The Students' Union and Departmental Association play an important role in the total development of the students. The Union organises such activities as debates, games and sports tournaments, hikes and camps etc. The elections to the Executive Committee of the Students' Union were held on 5th August, 1968. The following were elected office bearers:—

President	Shri Purushottamlal Parashar.
Vice President	Shri Hukam Chand Sharma.
General Secy.	Shri Nilam Kumar Agarwal.
Jt. Secretary	Shri Rameshwar Lal Kabra.
Cultural Secy.	Shri Zulfiquar Ahmed Quereshi.
Games & Health Secretary	Shri Bhawani Singh.
Finance Secretary	Shri Narendra Kumar Gupta.

An introduction hike was arranged for all members of the staff and students at Udaisagar on the 11th August, 1968.

The Union organised Inter-College debates in Hindi and English at Udaipur. It also arranged several talks by learned persons on the various aspects of life in the morning assembly hours.

The Annual Function of the Institute and farewell function to the outgoing students of the Union were organised on 28th February, 1969. Shri P. P. Singhal, a local industrialist was the Chief Guest.

The function was followed by annual report by the Director of the Institute, address by the Chief Guest, prize distribution and 'At Home'.

11. THE FARM:

Production of seeds of improved qualities and experimentation in growing new varieties of crop has been the main objective during the year

under review Wheat seed produced at the farm served almost the entire need of the local district Hybrid maize seed was also grown but the yield was low for want of rains

Results in producing seed of R R 21 quality were very satisfactory The yield was comparatively high The gross income stood at Rs 1,761,961 12 against an expenditure of Rs 1,40,231 35 leaving a net surplus of Rs 36 729 77 for the year This includes income from the land purchased from Rao Manohar Singh of Bedla

IX RAJASTHAN VIDYAPEETH

MANIKYA LAL VERMA SHRAMJEEVI COLLEGE, UDAIPUR

M V. Shramjeevi College, Rajasthan Vidyapeeth was founded in 1956 as an evening degree college to cater to the education of those who are gainfully employed during the day

The college has been affiliated to the University of Udaipur, since its inception as a multifaculty University in 1964 The college prepares candidates for the Bachelor s degree in Arts of the University of Udaipur in the following subjects —

T D C	English Literature, Hindi Literature, Economics Political Science, History, Geography, Sociology and Sanskrit
Pre-University	English Literature, Hindi, Literature, Economics, Civics, History, Geography, Sanskrit

2 ENROLMENT & RESULTS

	Class	Number
(a) Enrolment	P U C	40
	I Year T D C	14
	II Year T D C	159
	III Year T D C	67

contingent adjudged all round best. 10 cadets helped the Civil authorities in maintaining law and order during the general strike called by the Central Government employees on the 19th September, 1969. 53 and 3 cadets appeared in the "B" and "C" certificate examinations respectively. Considering all aspects, the N.C.C. activities were quite satisfactory.

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T.D C	English Literature, Hindi Literature, Economics, Political Science, History, Geography, Sociology and Sanskrit
Pre-University	English Literature, Hindi, Literature, Economics, *Civics*, *History*, Geography, Sanskrit.

2. ENROLMENT & RESULTS

	Class	Number
(a) Enrolment	P U C	40
	I Year T D C.	14
	II Year T.D C.	159
	III Year T D C	

(b) RESULTS :

Examination 1969	No. of candidates Appeared	No. passed in Division			No. of passed without Dn.	Total	Percent
		I	II	III			
PUC.	31	—	14	2	—	16	50%
T.D.C. I	139	—	—	—	97	97	70%
T.D.C II	129	—	—	—	85	85	66%
T.D.C. III	64	—	18	40	—	58	90%

SCHOLARSHIPS AND PRIZES :

The College provides half-free-ships to the needy students. Financial aid to the poor and needy students for tuition and examination fees is provided from the University Aid Fund. Seven students belonging SC/ST were awarded Government of India scholarships.

LIBRARY FACILITIES :

The Library consists of 12,500 Volumes and subscribes to 93 periodicals. It is being run on the open-access system.

HOSTEL FACILITIES :

This college has no hostel facilities for the students.

GAMES FACILITIES :

Inspite of being an evening college it provides facilities for out-door and in-door games. Students have been participating regularly in the University tournaments.

EXTRA-CURRICULAR ACTIVITIES :

1. The students Union at this college is on the pattern of the Lok Sabha and is known as "Republic." It is an active body and organises debates, extension lectures and cultural programmes.

RAJASTHAN VIDYAPEETH CHANCELLOR'S HINDI & ENGLISH DEBATE COMPETITIONS :

The students of Rajasthan College of Agriculture Engineering and Technology, Udaipur and Savitri College, Ajmer won the Trophy in English and Hindi Debates respectively in 1968-69.

FINANCE

(I) The College received, a grant of Rs 40,947 from the University Grants Commission for the Development of the library books furniture and laboratory equipment

(II) INCOME		EXPENDITURE	
1 Non recurring	7,324	1 Recurring	1,57,271
2 Recurring	1,57,713	2 Non recurring	42,554

SPECIAL FEATURE

This college has been organising 'Shranee Yojna This is a system for bringing groups of students in close contact with teachers The teacher in-charge does his best to give the students guidance and encourages them in extra reading and extra curricular activities They meet together once in a month and discuss problems of interest This has been a great help in stimulating students towards fruitful activities

X BHUPAL NOBLES' COLLEGE, UDAIPUR

The results of the College students at the University examinations were as follows —

III Year Science	88%
III Year Arts	100%
II Year Science	50%
II Year Arts	55 44%
I Year Science	76%
I Year Arts	84%
Pre University Science	48%
Pre-University Arts	64%

The following students secured positions —

FIRST YEAR T D C SCIENCE EXAMINATION

1 Stavirsingh
2 Shailendra Kumar Sharma
3 Haridas Pillai
4 Mahasingh Akhlawat
5 Prem Nath
6 Indrajeetsingh
7 Padam Chand Malnot

PRE-UNIVERSITY SCIENCE :

1. Chandmal Bohra.
2. Hastimal Jain.

UDAIPUR UNIVERSITY INTER-COLLEGE TOURNAMENTS :

Our team was victorious in Hockey and Football and we were runners-up in Kabaddi.

Mahesh Kumar Nepalia and Takhatsingh chauhan both of T.D.C. 1st year Science were participants in the N.C.C. Parade on the Republic Day at Delhi on January 26, 1969.

Narbada Shankar Sukhwal of T.D.C. IIIrd Year Arts distinguished himself in a number of elocutionary contests at the Inter-College level.

The following new appointments were made in the teaching staff :

Shri D. K. Rathore	Hindi
Shri A. M. Golwalkar	Chemistry
Shri R. S. Bordia	Physics
Shri R. C. Somani	Zoology
Shri V. R. M. Jain	Botany
Dr. V. V. Vyas	Hindi
Shri Nizamuddin	Chemistry
Shri S. P. Mathur	Physics
Shri G. S. Rathore	English

The number of the students this year was 1110.

The College as usual organised the Mama Aman Memorial Football Tournament and Col. Vijay Singh Cricket Tournament. A large number of teams participated and both the tournaments were very successful.

A number of debates and other literary activities were organised.

XI VIDYA BHAWAN G S TEACHERS' COLLEGE, UDAIPUR

INTRODUCTION

The year under review saw several significant developments almost in every aspect of college work The M Ed syllabus was completely reorganised the B Ed practice teaching programme was better coordinated with the teaching of theory papers the college union programme of co curricular activities was placed on a more systematic basis the old Students Association was formed the Jan Shikshan was changed into a research journal and a systematic plan of campus improvement was undertaken

STAFF CHANGES

Dr S N Mukerji took over as Principal of the College early in May, 1968 and spent the Summer Vacation partly in planning the current session s programme and partly in guiding the two Summer Institute organised at this College one for the Professors Readers and Lecturers teaching Psychology in the Universities and Arts and Teachers Colleges in India and the other for the experienced headmasters of the Secondary Schools of Rajasthan

Shri U N Dixit went to the United States for six months for study and observation of teacher education programme in that country Dr (Mrs) Satya Sharma went to England on a year s leave for higher studies Miss Usha Shakalya was deputed to do her M Ed in two years while still working in the College Because of increased enrolment we had to appoint one full time and two part time lecturers Shri M K Raina joined us as a full time Lecturer in Education but left us a few months later on grounds of health Shri Harigiri Goswami and Shri S R Phadnis joined us as part time lecturers specially for guidance and supervision of our regular and block practice teaching programmes Shri Nand Kishore Shrimali s leave was extended for another year to enable him to continue his assignment at the State Institute of Science Education Udaipur

SIGNIFICANT DEVELOPMENTS

New System of Practice Teaching

The programme of practice teaching this year was organised on entirely new lines The B Ed students were divided into two groups On

first three days of the week, the programme of theory papers continued undisturbed for the entire college. On the three days, while one group went out to local schools for practice teaching, the other group had criticism lessons in them orning and guided library study in the afternoon. Thus both theory and practice programmes moved forward side by side, supplementing and reinforcing each other. This new arrangement enabled students to devote more time to lesson-planning and independent study.

COMPULSORY LIBRARY STUDY :

Although our college Library is better equipped than those of ordinary Teachers' Colleges in the country, most of our students did not take adequate advantage of it. The College programme was so tight that it gave them little or no time for independent study. Moreover, many students could not read books in English intelligently. As already mentioned, during the practice teaching period, the non-practising group compulsorily spent its half day in the College Library. A large number of books in Hindi were also added, and several copies of important books were purchased to facilitate better circulation.

REVISION OF THE M.Ed. SYLLABUS :

At the instance of the new Principal, the entire M.Ed. Syllabus has been recognized on the lines suggested by the Indian Association of Teacher Educators. Several new areas of specialization have been added and the detailed syllabuses of various papers in each area have been prepared. It has also been proposed to allow M.Ed. candidates, in special cases, to answer their question papers in Hindi and also to use Hindi as their medium for their dissertations and sessional work. These proposals have already been approved by the various Committees of Courses in Education and by the Faculty of Education.

INTRODUCTION OF THE EARLY CHILDHOOD EDUCATION DIPLOMA COURSE :

In Rajasthan there has been no University approved training course for the teachers of montessori and nursery Schools. The College prepared a detailed plan of a one-year Diploma Course in Early Childhood Education and submitted it to the University of Udaipur for approval. The scheme has been approved. The admission qualifications for this course is a pass at the Higher Secondary Examinations. The College proposes to start this course from the next session.

THE JAN SHIKSHAN—A RESEARCH JOURNAL

There has all along been a dearth of suitable articles for our JAN SHIKSHAN Efforts were successfully made this year to produce adequate number of articles and research papers of good quality Steps are being taken to develope this periodical into a research journal of high standard—to begin with summaries of the research work done by the staff and M Ed students have been generally used Special numbers containing articles and research papers used related to particular fields have been emphasized We have had special numbers devoted to such problems as ' Wastage and Stagnation in Primary Education , Gandhi as an Educationist, etc

OLD STUDENTS ASSOCIATION

For a number of years we tried unsuccessfully to form an effective association of our old students This year a Committee of the staff prepared a draft constitution On the occasion of the University Convocation the old students of the College were invited to a cultural programme and a Community dinner The response was very good and several hundred old students came At this meeting, the draft constitution was presented and passed with certain modifications and various office bearers were elected As many as fifty life members and 150 ordinary members have been enrolled so far

The Old Students' Association will concentrate on the continued professional growth of its members and the development of the College

BUILDING FUND

We have instituted a building fund We introduced this year a development fee of five rupees per student An appeal has also been made to the students just completing their course to donate at least a part of their caution money to the building fund of the College The response has been encouraging This will form the nucleus of our building fund With the help of the money realized so far, the ground between the ladies' hostel and the College eastern wing has been levelled, the students common room has been completed and the cycle-stand has been shifted to a more suitable place near the College gate

THEORY PAPERS

A senior member of the staff was made the convener of each paper The convener distributed the different topics of the paper among his

group and ensured regular teaching even when a member of the staff was on leave. Regular tutorials were held for guidance to individuals and groups. Essays and papers written by the students were discussed in these tutorials.

During the last months of the session a combined class of the two sections was held on certain days of the week where the conveners of the various papers discussed the students' difficulties.

With regular guidance and emphasis on self-study in the library mentioned earlier, the programme of theory work was carried on smoothly and satisfactorily.

STATE AND NATIONAL LEVEL SEMINARS :

The college was selected for the organization of several State level and National level Seminars. While the details of these are given in another section of this report.

ACTIVITIES OF THE EXTENSION DEPARTMENT :

Brief mention may be made here of a few significant ones. In collaboration with the Indian National Commission for Cooperation with UNESCO, we organized a State level workshop on Education for International Understanding in November, 1968. On behalf of the State Department of Education, we also organized a month's Summer Institute for experienced secondary school headmasters. In collaboration with the N.C.E.R.T. we organised several workshops on programmed instruction, and one Summer Institute on Learning and Motivation for the lectures of the Teachers' Colleges of the country. On behalf of the Board of Secondary Education, Rajasthan, we also organised a ten-day workshop for paper-setters in several school subjects.

DISTINGUISHED VISITORS AND THEIR LECTURES :

A number of distinguished visitors came to the college during the year under review and some of them addressed the staff and the students also on a few problems of education. Among those who visited us were Shri Ishwar Bhai Patel, Vice-Chancellor, Vallabh Vidyapeeth, Dr. H.M. Mathur, Director of Education, Dr. Robert Henderson, Regional Director, Foreign Policy Association, Chicago, and Dr. I.R. Kidd, Head

of the Department of Adult Education Ontario Institute of Studies in Education, Toronto

Co curricular Achievement •

COLLEGF UNION

The college Union this year organised its cultural programmes regularly Thursday afternoons were devoted entirely to the programmes of *the Union Since our college hall could not accommodate* all our students, we requested our Kalasansthan to make their hall available for these weekly programmes These programmes included lecturers debates recitation of poetry panel discussion, etc In addition to these, the following were also organised by the College Union

In order to bring the members of the staff and students together a get together function was organised on the 18th July at Udai Niwas It was a whole day programme including community lunch, songs, music games and tea in the evening

ASSIGNMENT OF DUTIES

In order to facilitate the smooth functioning of the College, the work was distributed among the four readers, as follows

1 Dr (Mrs) Indu Dave — Convener of Post graduate Programme

2 Shri B D Srivastava — Convener of Publications and Library

3 Dr S N Dhondiyal — Convener of Co Curricular Programmes

EXAMINATION RESULTS

Because of the failure of the *State Department of Education to send* its promised quota of 125 candidates for the B Ed Class at the last moment we had to throw the admissions open to candidates of poor quality also *But because of the reorganized* programme of practice teaching and theory work the candidates performance at the B Ed Examination was commendable For several years we had no doubt First in Theory and Practice but this year two of our candidates got a first class both in theory and practice A large number got a second-second and a fewer number a double *third than last* year We also secured the first seven ranks out of ten in the University Examination.

	Total No. appeared.		Division I	Division II	Division III	Failure	Pass%
B.Ed. 1968-69	236	Theory	2	106	198	Nil	100%
		Practice	21	200	15	Nil	100%
B.Ed. 1967-68	216	Theory	Nil	78	136	2	99%
		Practice	19	187	10	Nil	100%

The M.Ed. result was also encouraging, as the students secured I class and as many as 21 II class. It is also worthy of note that Shri Shiv Kumar was awarded the Ph.D. Degree in Education.

Curricular Programme

Some of the curricular achievements have already been mentioned under the sub-heading-Significant Developments. A few additional programmes worth-mentioning are as follows :

ORIENTATION LECTURES :

There were orientation lectures and demonstrations at the beginning of the session in order to make the programme of practice teaching more effective—All the lectures emphasised those aspects of their papers which were likely to be useful in the class-room teaching.

REGULAR AND BLOCK PRACTICE TEACHING :

While regular teaching practice was held as usual in local schools, the block-practice teaching had to be organized as far afield as Pratapgarh, Gulabpura, Banswara, etc. Students were divided into small groups of fifteen or sixteen, each under the guidance of a lecturer. Two batches were sent to larger cities where several schools were available such as Dungarpur, Bhilwara, Pratapgarh, Banswara, Nathdwara, etc. All the batches went to schools outside Udaipur, because groups staying in Udaipur in past years did not like to work in local schools as whole-time teachers. Guidance in lesson-planning and in evaluating students' achievement on a scientific basis was regularly given.

The Union celebrated the Human Rights Day on the 10th December, 1968.

A Dance and Music competition of the students of our practising schools was also organised at two levels for seniors and juniors As many as twelve institutions participated

OPEN AIR SESSION

The Open Air Session of the College was held at Jai Samand from 1st to 4th December, 1968 Arrangements for residence and meals were excellent and all the students enjoyed themselves very much While the B Ed students made surveys of the social, economic and cultural life of the various villages around Jai Samand, the M Ed students organized a pannel discussion on the educational policy of the Government of India

PRESIDENTS CUP VOLLEY-BALL TOURNAMENT

Fourteen institutions participated in the Presidents Cup Volley ball tournaments this year This is open only to the members of the staff of educational institutions The K P Higher Secondary School were the winners of the cup

VARIOUS SOCIETIES

The B Ed students were divided into various societies according to their subjects—English Society, Hindi Society, etc The students of the M Ed Class formed the M Ed Society All these societies regularly organized short cultural programmes, hikes, trips to neighbouring places like Chittor, Nathdwara, Gawar Mines, etc

EXTENSION DEPARTMENT

Our Extension Services Centre serves nearly 200 Secondary and Higher Secondary Schools in eight districts of Rajasthan During the year under review the Department continued its programme of in service education for teachers, through the following activities —(i) Development of Instructional Material (ii) Programmed Instruction, (iii) Promoting Professional Organization, (iv) Promoting Experimental work leading to improvement of School practices, (v) Collection and Dissemination of tested practices, (vi) Publication of literature, (vii) Seminar Reading Programme, (viii) Audio-Visual and Library Service, (ix) Demonstration Lessons in Schools, and (x) Conferences, Seminars, etc

The idea of instructional material was further
Two sequential short-term workshops were organized
Extension Centre received an incentive grant of Rs.

In the Seminar Reading Programme of the N.C.E.R.T. the teachers of this extension area have been receiving national awards since the inception of the scheme. This year too, a teacher from this area received the award at the National level.

WORKSHOPS AND SEMINARS :

1. Workshops on Development of Instructional Material in Hindi at Indragarh (Kota) for a period of 6 days in December, 1968.

2. Sequential Workshops on Programmed Instructions—Phase-I at Udaipur, for teachers of this area from 25-8-68 to 1-9-1968.

3. Sequential Workshop on Programmed Institution at N.I.E., New Delhi in collaboration with the Department of Psychological Foundations, N.C.E.R.T. New Delhi, for the teachers of this Extension Area.

4. The Summer Institute for Headmasters from the 24th May to the 20th June, 1968, in collaboration with the State Department of Education, Bikaner.

5. In collaboration with the Indian National Commission for Co-operation with UNESCO a State Level Teachers' Workshop on Education for International Understanding was held from 4th to 8th November, 1968.

6. In collaboration with the Board of Secondary Education Ajmer, a ten-day workshop for paper-setters was held.

7. In collaboration with the Department of Psychological Foundations (N.C.E.R.T.) 35 days' Summer Institute on Learning and Motivation was held in May-June, 1968, for the Lecturers of Teachers' Colleges.

PUBLICATION OF THE YEAR :

1. Report of the Summer Institute for Headmasters.

2. New Trends in School Practices.

3. Report of the Sequential short-term Workshop on Programmed Instruction—Phase-I.

4 National Policy of Education, Government of India's Resolution 1968 (a re print)

5 Five Years of Secondary School Headmaster's Forum

Staff Publications and Research :

Books

Dr S N. MUKERJI

Education in India–Today and Tomorrow, Acharya Book Depot, Baroda, 6th Edn

Education of Teachers in India, (Two Volumes) S Chand and Co, Delhi (as Editor)

Contributed two chapters, viz (i) Educational Administration and (ii) Special Education in the Year-Book on *Educational Research*, N C E R T

SHRI B D SRIVASTAVA

Essential English Structures—Book-I

Essential English Structures—Book-II

Essential English Structures—Book-III

Students' Book Depot—Alwar

Dr L K OAD.

The Philosophy of Sarvodya and Its Educational Implications (in collaboration with Dr V V Thirtha) Chandigarh Mohindra Capital Publishers, 1969

SHRI D C JOSHI

1 Five Years of Secondary School Headmasters Forum, Udaipur
2 Programmed Learning Workshop—Phase I
3 National Policy of Education
4 New Trends in School Practice
5 Headmasters' Summer Institute May/June, 1968
6 Instructional Material Series—(Social Studies)

4 National Policy of Education, Government of India, [illegible]
1968 (a re-print)

5 Five Years of Secondary School Headmaster's Forum

Staff Publications and Research :

Books

Dr S.N. MUKERJI :

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Education of Teachers in India, (Two Volumes, S. Chand and Co, Delhi (as Editor).

Contributed two chapters, viz (i) [illegible] (ii) Special Education in the Year-Book on [illegible], N.C.E.R.T.

SHRI B.D SRIVASTAVA :

Essential English Structure—Book-I

Essential English Structure—Book-II

Essential English Structure—Book-III

Students' Book Depot—[illegible]

Dr L.K. OAD :

The Philosophy of [illegible] in collaboration with Dr. [illegible] Publishers, 1969

SHRI D.C. JOSHI :

1 Five Years of Secondary School Headmasters Forum [illegible]

2 Programmed Learning [illegible]

3 National Policy of Education

4 New Trends in [illegible]

5 Headmasters [illegible]

6 Instructional [illegible]

SHRI O.S. DEWAL :

1. All India Workshop in Programmed Learning at Ranchi from 4th October, 1968 to 16th November 1968.
2. All India Workshop in programmed Learning at New Delhi from 24th December, 1968 to 4th January, 1969.
3. All India Conference in Programmed Instruction at Delhi University from 28th February to 1st March, 1969.
4. Seminar on "Evaluation of Philosophy of Education" at Vidya Bhawan, Udaipur, from 22nd March 1969 to 27th March, 1969.

SHRI PADAM SINGH :

1. Worked as a Resource person in the Workshop on the Instructional Material organized by the Department of Extension Services, Vidya Bhawan Teachers, College, Udaipur (Rajasthan).

OUR DIFFICULTIES :

The College was originally built for about 50 students. Now the number has increased more than five times. We face great difficulties of accommodation. We have no hall, where all students and staff can sit together. There is a lack of adequate furniture also. With the help of the development fee, however, some efforts have been made to provide a Common Room for hostellers, a cycle shed, and open space for joint meetings. The unfinished part of the men's hostel is also proposed to be completed very soon. Construction work has already been started. The uncertainty of finances at times hampers the programme and chills the enthusiasm of many ardent co-workers. Perhaps these are normal features in a private institution. These will have to be faced, private philanthropy and more flow of funds from Government can alone improve the situation.

XII. LOKMANYA TILAK TEACHERS' COLLEGE, DABOK, UDAIPUR

MANAGEMENT :

It is a private Institution managed by the Rajasthan Vidyapeeth, Udaipur.

COURSES OF STUDY

It runs a course of study leading to B Ed Examination of the University of Udaipur Besides the compulsory papers I, II, and IV, it had classes in the following subjects under paper III

Subjects	No of Scholars
1 Hindi	123
2 English	13
3 Geography	57
4 Civics	55
5 Economics	25
6 History	50
7 Sanskrit	7
8 Social Studies	126
Total	456

Besides the above, it also had courses in specialisation under paper V in the following subjects —

Subjects	No of Scholars
1 Education and Vocational Guidance	15
2 Pre-Primary Education	7
3 Education of Exceptional Children	
4 Hindi	8
5 Social Education	21
6 Geography	8

ENROLMENT

The number of scholar teachers on the rolls of the College [illegible] The number taking up each subject has been indicated under [illegible] since each scholar teacher has to take up two subjects [illegible] shown therein is double of this number

RESULTS :

All the 228 trainees who appeared at the B.Ed. Examination 1969 passed in theory and in practice teaching. The divisions secured were as follows:—

No. appeared		Div. I	Div. II	Div. III
228	Theory	—	34	144
	Practice	13	204	11

SCHOLARSHIPS AND STIPENDS :

The following statement shows the scholarships and stipends received by the students of the College during the year under report.

Scheduled Castes 4.

STAFF :

There were 10 members on the staff besides the Principal. A statement is attached.

LIBRARY FACILITIES :

At the end of the session 1966-67, there were 770 books in the library. During 1967-68, 801 books were added, and in during 1968-69, 485 more books were added at cost of Rs. 4236.28. The Reading Room subscribed to Dailies, Weeklies and Educational Magazines.

HOSTEL FACILITIES :

In its humble way, the college continued to provided hostel facilities to scholar-teachers. It is expected that batter facilities will be provided on receipt of a grant from U.G.C.

EXTRA CURRICULAR ACTIVITIES :

Games and P.T. formed a regular feature of the College. The games included Hockey, Football, Volley-ball, Cricket, Badminton and Table-Tennis. Besides these, other physical activities, field events and sports were organised. The students participated in the Tournaments organised by Vidya Bhawan, District Volley Ball Association, M.B. College etc. They also attended the All India Teachers' Training meet at Allahabad and won prizes.

SPECIAL FEATURES

An important feature of the activities of the College is the morning assembly at which the Samstha geet is sung by all in Chorus, after which an inspirational talk is given by students by turns At the weekend, there is an assembly of 4 other cognate institutions running at the campus, creating an atmosphere of co-operation and corporate life

Another important feature is Tilak Memorial Lectures Shri I J. Patel, Vice-Chancellor, Sardar Patel University Vallabh Vidyanagar delivered the lectures during the year

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PART III

REPORTS FROM DEPARTMENTS

DEPARTMENT OF AGRICULTURAL BOTANY

1. ENROLMENT :

Post Graduate—Previous		7
	Final	4
Research—		5

2. RESEARCH FACILITIES AND AREAS OF INTEREST :

(a) Genetics and Cytogentics.

(b) Plant Breeding.

(c) Plant Physiology.

3. RESEARCH PROJECTS :

There are no outside sponsored research projects in the Department. However the staff is working on the following Departmental Projects:—

(a) Selection of umber coloured dwarf wheat for this area.

(b) Breeding of linseed varieties for high oil and for arid regions of Rajasthan.

(c) Introducing dwarfing genes in the Indigenous varieties of wheat by crossing.

(d) Effect of Insecticide Spray on Cytogenetical studies in barley.

(e) Germination and Growth studies in Cumin.

4. Bhatnagar, S.K.; Sudhir Kumar; D.C. Sharma and H.N. Mehrotra 1969 : Effect of fatty acids on huskless barley : Indian J. Genet. 29 (2) : 276-279.

Pandey, S.N.; 1969 : Effect of N.P.K. and MO on nodule formation. Indian, J. Agron. 14 (2) : 205-207.

1969 : Effect of IAA and G.A. on crude protein contents of maize plant under the influence of various labels of SAR and conductivity of irrigational water. Food Farming and Agril. 2 (4) 40-43.

1969 : Dormancy in Seed 21 (10) : 31-34.

5 The following Scientists visited the Department and gave lectures —

(i) Dr Adolph Hecht, Professor of Genetics and Chairman, Department of Botany, Washington State University, Pullman Washington, USA

Subject 'Evolution of Qenotheras', on 4 8-1968

(ii) Dr W Gottschalk, Director, International Institute, of Genetics, University of Bonn , Bonn W Germany

Subject 'The Study of Evolutionary problems by means of Induced mutations', on 31 8-1968

DEPARTMENT OF SOIL SCIENCE AND AG CHEMISTRY

The general psychological boost provided by the success of the "Green revolution" may be said to have been fully reflected in the working of the Deptt Although teaching formed the mainstay of the activities, the functions of Research and Extension can be measured by the larger number of publications in various journals as well as more Extension Lectures delivered to the various groups coming for training under the Directorate of Extension from time to time

(A) RESEARCH

All the five students under Dr S N Saxena, Head of the Department were actively engaged on their problems Mr B L Baser was awarded Ph D on his ' Studies on Manganes of Rajasthan Soils'

(B) M Sc THESIS WORK

The high academic level of the *M Sc (Ag) Soil Science Class* theses was continued to be maintained

The following five students completed their thesis work on the topics mentioned against each —

Shri Dhyan Sarup	' Studies on some phosphate dissovers with special reference to their use ... ilizers for wheat"

Shri M.U. Khan	"Effect of salinity, alkalinity and boron on the inorganic composition and phytase activity of Wheat, Barley and Pea".
Shri M.L. Gupta	"Effect of irrigation, phosphate fertilization and growth of legumes on physical properties of soil".
Shri D.R. Tank	"Studies on the genesis of some soils from Bedach Basin and adjoining arravali Ranges".
Shri M.L. Kothari	"Studies on availability of phosphorus in some soils of Udaipur Tract".

27 M.Sc. theses on as many problems have been successfully completed so far.

(C) 2 papers were published by Dr. S.N. Saxena this year and 11 others are under correspondence and are likely to be published in the next year. The list of published papers for the department is as follows:—

1. "Distribution of organic phosphorus in soils of Rajasthan and its relationship to soil characteristics" by Mr. H.C. Bhandari and Dr. S.N. Saxena. Indian Soc. of Soil Science Journal.

2. "Studies on the effect of plant growth on inorganic phosphorus fractions in some soils of Rajasthan" by Mr. P. Singh and Dr. S.N. Saxena, Indian Society of Soil Science Journal.

3. "Effect of Pesticide treatments of seeds on the carbon dioxide evolution in Rhizosphere soil, and on germination percentage of some Field crops" by Mr. B.L. Lodha and Shri P.B. Lall Annals of Arid Zone. Vol. 7. March, 1968.

4 ' Weathering indices in loess covered Wisconsin and Illinoian Terraces of Central Ohio by Dr A S Khangrot (Presented at the Annual Meeting of the Geological Society of American at Columbus Ohio 15 17 May 1969)

(D) (i) Mr S K Thakre continued to work on his problem Effect of insecticides on plant growth and soil micro, organisms with special reference to Azotobacter

(ii) Mr A K Sacheti continued a major portion of his work on ' Studies on inorganic phosphates of soil with special reference to transformations

SPECIAL FEATURE

A very special feature of the year was the holding of the 34th Annual General Meeting of the Indian Society of Soil Science and the ' Symposium on Dry Land Farming on May 23 26 1969 at Udaipur. It was a unique honour to our Deptt as well as the University and was conducted to the entire satisfaction of the visiting scientists

EXPANSION OF FACILITIES

The soil testing laboratory was converted into the Micronutrient scheme Lab by the USAID Group Leader and samples are being analyzed regularly in the Lab

POSTINGS, TRANSFERS AND TRAINING

Dr Jagannath left in the middle of the session and Dr S L Mehta was appointed lecturer he resigned for having served a short period only

Dr B L Jain and Mr S K Thakre joined as Lecturer in Agril Chemistry on March 17 and February 22 1969 respectively

In June 1969 Dr A S Khangrot Reader in Soil Science and Agricultural Chemistry, returned and rejoined duties after completion of his training (Leading to the Ph D degree) in Soil C on at the Ohio State University under the USAID .

DEPARTMENT OF AGRICULTURAL ECONOMICS

ENROLMENT :

1. Post-graduate :

(a) Previous	—	3
(b) Final	—	4

RESEARCH FACILITIES AND AREA OF INTEREST :

Investigations relating to Farm Management and Land Economics have been undertaken by the staff over and above the full teaching load. Presently, there is no staff entirely for Research.

RESEARCH PROJECTS/U.G.C. SCHEMES OTHER FIELDS OF WORK :

A research project entitled "A study of the relative efficiency of co-operative farms in Rajasthan." Sponsored by the Research Programmes Committee, Planning Commission, Government of India, was started in July, 1967 and has been finalized at the end of April, 1969. The draft report of the project has alsn been submitted to the Research Programmees Committee, Planning Commission for publication.

RESEARCH PUBLICATIONS :

(a) Teachers :

Rathore, B. S. and Bapna, S. L. : 'Capital Formation in Farming Sector of Udaipur District (Rajasthan)' Indian Journal of Agricultural Economics, Oct.-Dec., 1969.

Purohit, M. L. and Agarwal, N. L. : 'Farm Management acts as a guide in choice aod decision making' Farm Journal, Mar-Apr., 1969.

Purohit, M. L. and Agarwal, N. L. : 'Farm Management Tools and Techniques for reorganising the farm business'; Farm Journal, June, 1969.

Purohi, M. L. and Agarwal, N. L. : 'Farm Management teaches the farmer, how to run a profitable farm with a case illustration'; Farm Journal, November, 1969.

Purohit, M. L. and Agarwal, N.L. : 'Farm Records and Accounts'; Kurukshetra, June, 1969.

SEMINARS AND CONFERENCES :

Dr. B. S. Rathore attended a conference on Long-Range Agricultural Adjustment Analysis organised jointly by Indian Council of Agricultural

Research and United States Agency for International Development on 18th and 19th August, 1969 in New Delhi Dr Rathore also attended the meeting of Heads of Agricultural Economics of Agriculture Universities organised by the Ford Foundation at Bangalore on 10th, 11th and 12th December, 1969, A seminar on "Economic Development with special emphasis on Agricultural Development' was arranged by the U S Information Service in collaboration with the Department of Economics, Punjab University, Chandigarh on 15th, 16th and 17th January, 1970 Dr Rathore contributed to this Seminar a paper entitled 'Role of Credit in Agricultural Development in performance of cooperative financing agencies in Rajasthan '

Shri M L Purohit attended a short course in Agricultural Finance arranged at Bankers' Training College, Bombay from 17th November to 22nd November, 1969

Shri P M Sharma attended a seminar arranged by The Ford Foundation at University of Agricultural Science, Bangalore on December 8, 9 and 10, 1969 A paper was contributed by Mr Sharma entitled 'Problems of Agricultural Credit and Field of Research ' He also contributed a paper on 'Taxation on Agricultural Land' in the III Annual Conference of Rajasthan Economics Association held at Udaipur on 16th, 17th and 18th October, 1969

6 OTHER ACTIVITIES

Planning Forum of the Rajasthan College of Agriculture, which is under the department of Agricultural Economics, organised a "Farmers' Field Day' in the village Titardi of Girwa Tehsil The main features of this programme were-demonstrations, film show, exhibition, and crop and vegetable growing competitions

An educational trip to Fateh Nagar town was also arranged by the Planning Forum to make students acquainted with the development and functioning of economic institutions like regulated along with other economic aspects of rural life

DEPARTMENT OF AGRICULTURAL ZOOLOGY & ENTOMOLOGY

1 ENROLMENT

Post graduate	(a) Entomology	—	7
	(b) Plant Protection	—	

Research :	Udaipur campus	—	3
	Jobner campus	—	4

2. RESEARCH FACILITIES & AREAS OF INTEREST :

The two campuses of the University *viz* Udaipur and Jobner have different areas of interest of research and hence, the facilities for different types of work exist at either place. On the whole the Department has facilities of research for the following areas :

(a) Insect Morphology : With particular references to morpholatrics of Grasshoppers and Honey bees and internal and external morphology of insects in general, at Udaipur Campus.

(b) Economics Entomology : The facilities for work on the biology, behaviour and control of various crop pests exist at both the places and research work on various crop pests and their control is in progress both at Jobner and Udaipur campuses.

(c) Storage Enromoloty : Facilities for work on stored grain pests, their ecology and control exist at both the campuses and a variety of work is in progress at both the places.

(d) Insect physiology & host plant resistance : Adequate research facilities on this work exist at Udaipur campus and the work on Maize, Sorghum, Bajra and some other important crops is in progress.

(e) Insect Toxicology : The laboratories at both the campuses are engaged in work on insect toxicology. Work on some general toxicological problems and on pesticide residues is in progress at Jobner campus while at Udaipur campus work is being done on residues in vegetables, and some other general texicological aspects.

(f) Industrial Entomology : Adequate facilities for work on silk worms are available at Udaipur campus and the work on various exotic and Indian varieties of mulbery is in progress there.

3. RESEARCH PROJECTS :

The following research projects are being run as departmental research projects.

JOBNER CAMPUS

1. Prevention and control of pulse beetle *C maculatus* in some stored pulses
2. Localization, uptake and accumulation of some systemic insecticides in crop plants
3. Laboratory studies on the sterilization of some stored grain pests by chemosterilants
4. Studies on the evaluation of an insecticidal spray schedule for the control of cabbage pests with particular reference to the nature and extent of residues of the recommended schedule
5. Studies on the suitability of various grain protectants and their dosages for the control of pulse beetle in storage
6. Microbioassay of residues of insecticides on brinjal
7. Studies on the biology and control of the insect pests of cauliflower
8. Studies on the biology and control of Bean aphid *Aphis* craceivora Koch

UDAIPUR CAMPUS (COLLEGE)

1. Evaluation of insecticidal control schedules for different crops
2. Studies on forage and pasture insect pests
3. Studies on susceptibility of different varieties of stored grains to the attack of insect pests

EXPERIMENT STATION, UDAIPUR

1. Survey of insects of Rajasthan and preparation of keys for indentification
2. Morphological and Taxonomic studies of Noctuids, Scarabaeidae, Coccinellidae, Jassidae and Aphidae
3. Studies on the occurence, biology, field ecology and nature extent of damage by insect pests of cauliflower, sugarcane, maize, bajra, jowar and stored grains
4. Investigations on the chemical control of insect pests and related toxicological problems
5. Investigations on host plant relationship [illegible] and digestive physiology of insect pests

RESEARCH PUBLICATIONS :

(a) Teachers :

Bhatnagar, S.P.; Yadava, C.B.S.; Bhatnagar, K.N. and Srivastava, B.P. 1968 comparative efficiency of some chlorinated and phosphatic insecticides against *Chrotogonus trachypterus* Blanchord. *Pesticides Academic of pest control Science*, Mysore : 21-27.

Bogawat, J.K.; Kaul, C.L. and Srivastava, B.K. 1969. Susceptibility of two species of pumpkin beetles to some insecticides. *Indian* J. Ent., 31 (2) : 170-172.

Gokhale, V.G. and Srivastava, B.K. 1969. Development of *Callosobruchus maculatus* F. on autoclaved french beans *Indian J. Ent.*, 31 (1) : 71-72.

Joshi, R.K. Kaul; C.L. and Srivastava, B.P. 1969. Studies on chemical control of white grubs, Holotrichia consanguinea Blanch. (Melolonthidae : Coleoptera) Indian J. Ent., 31 (2) : 143-146.

Kushwaha, K.S. and Sharma, J.C. 1968. Studies on seasonal incidence of insect population and the effect of insecticides. *Madras Agric.* J., 55 (6) : 265-272.

Mathur, L.M.L. 1969. Morphology of the nervous system of adult Prodenia Litura Ann. Entomol. Soc. Amer. 62 : 525-529.

Mathur, L.M.L. 1969. Bionomics of Stethorus gilvifrons Mulsant. (Coleoptera : Coccinellidae) Madras Agric. .56 : 7-11.

Mathur L.M.L. and Thakar, A.V. 1969. Digestive physiology of the tur pod bug, *Clavigrella gibbosa* Spin. (Heteroptera : Coneidae) Indian J. Ent. 31 (3) : 251-257.

Mathur L.M.L. 1969. Bionomics of the grapevine leaf roller *Sylepta lunalis G.* (Lepidoptera : lyralidae) ann. *Arid. Zone.* 8 (1) : 146-150.

Pandey, Y.D. 1969. Observation on the biology of *Hymexia* recurvalis Fab. as defoliator of the serious Kharif weeds in Rajasthan *Indian J. Sci. Indust.* 3 (2) : 107-108.

Pandey, Y D and Kamat, K L 1969 Sexual behaviour and sex determination of *Myllocerus Maculosus* Desb *Madras Agric J* 56 (6) 412-415

Pandey, S N 1968 Observation on the biology of Caster hairy caterpillar, *Euproctis lunata* Walker (Lepidoptera Lymantridae) Indian J Ent, 30 (4) 263 265

Pandey, S N and Bogawat Jatan Kumari 1969 Growth and development of Papilio demoleus (L) in relation to a wild host plant Indian J Ent, 31 (1) 92

Pandey, S N and Bogawat Jatan Kumari 1968 Note on the effects of certain wild plants, temperature and insecticides on the growth and development of Agrotis segetum Schiffer-Mueller (Lepidotera Noctuidae) *Indian J Agric Sci* 38 (5) 826 827

Parekh, P R and Sharma, J C 1969 Evaluation studies for the control of cotton pests in Rajasthan *Labdev J. Sci Tech* 7 308 310

Rawat R R Mishra, U S and Thakar, A V 1968 Preliminary study on the effect of different doses of nitrogen on the incisence of major insect pests of mustard *Madras Agric J* 55 (8) 363-366

Sankhla, G R and Kushwaha, K S 1969 Biology and external morphology of forage pests II The common tree-hopper, Tricentrus biocoler Distant (Hemiptera Membranidae) *Ind J Agric Sci* 39 (1) 132-161

Sharma, J C and Pareekh, P R 1968 Evaluation of insecticidal control schedule against cotton pests in Rajasthan Pesticides Oct 38-39

Sharma, J C 1969 Effectiveness of insecticides against Holotrichia consaguinea Blanch infesting Sugarcane in Rajasthan *Madras Agric J* 56 541-542

Sharma, J C 1969 A note on the specific gravity determination of haemolymph of American Cockroach *Periplaneta*
J Sci Tech 7 324

Srivastava, B.P. Kavadia, V.S. and Sharma, G.K. 1969. Effect of temperature and humidity on the residual toxicity of some insecticides. *Indian J. Ent.*, 31 (2) : 127-131.

Srivastava, R.C. 1969. A note on the neurosecretory path ways in Pyralla perpusilla Wik. (Fulgoridae : Homoptera) Experientia, 25 (10) : 1097-1098.

Srivastava, R.C. 1969. Observation on the neurosecretory axons in the aertal wall of Halys *dentatus* (Heteroptera : Pentatomidae) *Experientia* 25 (5) : 521-522.

Srivastava, R.C. and Dogra, G.S. 1969. Studies on the neurosecretory system of the bug *Secutellera nobilis* F. with reference to the material in the aertal wall *Anat. Auz* 125 : 525-534.

Srivastava, R.P., Mathur, L.M.L. and Bhatnagar, S.P. 1968. Grapes pests in Rajasthan *Research Bulletin 1. Agricultural Experiment Station, University of Udaipur, Udaipur* 1-27.

Thakar, A.V.; Mishra, U.S. and Rawat, R.R. 1969. A record of predatory mite Bochrlia sp. on *Bagrada cruciferarum* Kirk. Indian J. Ent., 31 (1) : 86.

(b) Research scholar :

Murthy, K.S.R.K. 1969. Head capsule as an index of larval instar in *Tryporyza incertulas* Wlk. *Andhra Agric. J.* 4. 28-29.

Murthy, K.S.R.K. 1969. Comparative Mammalian toxicities of commonly used insecticides *Journ. Agric. and Agro.* Industries 12 : 26-27.

DEPARTMENT OF AGRONOMY

I. TEACHING :

(a) Courses :

The Department offers various courses for Master's degree in Agronomy and Soil and Water Conservation. Most of the courses on the production of irrigated crops, soil management and weed control are

offerd at Udaipur Campus while those on soil conservation, rainfed and unirrigated crops and special weed problems are offered at Jobner campus Specialized courses on weed control in part fulfilment of the requirement for Master's degree in plant protection are also offered at both the campuses

(b) Enrolment

Agronomy	—	5
Soil and Water Conservation	—	6

Two candidates were registered for Ph D degree at Udaipur campus —

Name of the candidate	Title of Research Project	Name of the adviser
1 N S Katole	"Effect of time and application rates of sulphur on the response of maize and cowpea forage to select phosphate carrier in calcareous soils"	Dr H G Singh
2 S S Rathore	"Effect of crop management & soil stabilizers on grade of potato tubers in heavy soils'	Dr H G Singh

(c) Results

Two candidates submitted their theses for Ph D in Agronomy from Udaipur Campus Four students successfully completed M Sc in Agronomy and six in M Sc Soil and Water conservation

(d) Scholarships

The European Nitrogen Service Programme, an organisation devoted to promotion and distribution of nitrogenous fertilizers in India, put two scholarships at the disposal of the Head of the Department of Agronomy Udaipur campus which were awarded to deserving candidates at the M Sc level

II. RESEARCH :

(a) Facilities :

The Department of Agronomy has well-equipped laboratories. Several pieces of equipments like wet sieving apparatus, calorimeter cum-spectrophotometer, centrifuge and electric balance were added to the list of equipments. The Department provides field and lab facilities to all the staff members for experimentation. The facilities like typing of the research papers and their despatch are also available to them. Facilities for procuring reprints and sending reprints to bonafide research workers are also provided.

The department has its own sectional library. To avoid duplication with the main college library we are cocentrating on procurement of prints, periodicals, research reports cet. from various research organisations. Some rare books are also purchased by the Department. Complimentary copies of all the publications received by the Head of the Department are also donated to this library. This small library is financed from voluntary contribution by the staff and post-graduate students. The library receives the following journals at Udaipur campus.

1. Indian Journal of Agronomy.
2. Madras Agricultural Journal.
3. Labdev Journal of Science and Technology.
4. Journal of Soil Conservation, New South Wales.
5. Indian Farming.
6. Fortilite (From France)

(b) Achievements :

Main lines of research work in the Department are soil fertility and fertilizer use, physiologicai disorders in field crops, forage production, irrigation and weed control. Some of the highlights of research work at the two campuses are given below :

(a) Udaipur Campus :

1. Superiority of split application of nitrogen, both for maize and wheat has been further established by more comprehensive experimentation. Diammonium phosphate at planting below the seed

and ammonium sulphate in maize and urea (or ammonium sulphate nitrate) in wheat for top dressing are found best source of fertilization for heavy and calcareous soils of Udaipur Optimum doses of N for top dressing hybrid maize, double dwarf Mexican wheat, Indian wheat and berley have been worked out at 80 kg, 40 kg and 30 kg N/ha respectively Further work with new double and triple dwarf wheats and their response to higher levels of N, P and S are under study

2 The Department has a U S sponsored research scheme on foliar analysis The object is to collect plant samples from throughout Rajasthan showing deficiency symptoms and analyse these for their various micro and macro nutrients status The data obtained area envisaged to supply a clue to various mineral deficiencies Corrective measures shall follow such studies

3 Occurrence of chlorosis in many crop plants particularly paddy, peas, groundnut and sugarcane is becoming more common in Rajasthan This problem of chlorosis has been solved by applying 250-500 kg sulphur/ha to soil at least six weeks bofore sowing of a crop The use of sulphur has not only checked chlorosis but it has increased the survival of paddy seedlings by more than 400 per cent and increased the yield of crops like maize, wheat and sugarcane by 20-25 per cent In peas 100 per cent increase in yield was noted

4 COMPANION CROPPING OF FORAGE CROPS

By adopting cross planting of maize and cowpea using normal seed rates and drilling below the seed 50 kg diammonium phosphate with each crop, it has now been found possible to raise wonderful fodder cum green cobs crops The maize rows need to be top dressed further with 40 kg M/ha for good yield of cobs Russian Giant variety of cowpea does best as companion crop The method increased the yield of forage by 120 kg/ha and that of crude protein by 2 9/ha over usual sowing maize and cowpea in alternate lines Healthy green cobs provide, of course, additional income

5 IRRIGATION STUDIES

Research work on irrigation studies and working out consumptive use of water for wheat, maize and barley is in progress · wheat N P 718 could be matured best on 3-4 irrigations ·

like S-227 needed 6 irrigations. *Further work with new dwarf wheats* is in progress. Response of Hybrid maize to supplementary irrigation during drought-affected year has been studied and 200 per cent increase in grain yield has been work out by irrigating maize at 50 per cent available soil moisture over rainfed crop. A research project on consumptive use studies in barley crop has been completed and 50 per cent increase in grain yield and about 100 per cent increase in straw yield has been obtained by irrigating barley at 25% available soil moisture over no post-sowing irrigation treatment. Some very important relationships between actual consumptive use and evapotranspiration estimated by imperical equations have been worked out which are of academic as well/as practical significance.

6. WEED CONTROL :

Herbicide-cum-cultural practices have been standardized for weed control in 'maize-wheat' rotation. In maize 0.5 kg/ha of atrazine should be applied on crop rows immediately after planting followed by 1-2 usual inter now cultivations with bullock drawn implements. Intercultivation has been found important for heavy, crack forming soils of Udaipur. Herbicidal-cum-cultural control of weeds has given higher yields than either alone. Superiority of band application of simazine in place of usual blanket one, is of particular importance in avoiding its residual toxicity on wheat etc.

In cotton pre-emergence application of diuron at 1.0 kg/ha has proved greatly useful. This keeps the crop weed free for a month after which crop may be intercultivated once by bullock drawn implements. The treatment gives upto 20 per cent more yield than obtained by inter-cultivations alone.

The Department has the privilege of having a PL—480 research scheme on Physiology of weeds at a cost of Rs. 3.7 lakh for a period of five years under Dr. H. G. Singh as principal investigator. The work done so far in this scheme has revealed that replenishment of 150 per cent N removed by weeds in maize crop can significantly reduce the requirement of herbicide to be applied in maize which ensures greater safety to following crop. Experiments on growth regulants like CCC in reducing residual loxicity of atrazine and simazine are also in progress.

7 REDUCED TILLAGE STUDIES

Experimental evidence have shown that a good, well timed ploughing after pre sowing irrigation or rainfall followed by a single pass of woolen float to level up the field is all that we need Not only the practice cuts down fuel requirment and time spent on 2 3 harrowings but also permits quicker planting to take advantage of short planting season

8 REPELLING BIRDS

T M T D (Tetra Methyl thiuram disulfide), introduced as a fungicide for seed treatment, was found an effective bird repellent too A 0 6 per cent solution of T M T D sprayed on fully emerged ears of wheat has proved effective treatment to save wheat from sparrows etc The treatment reduced bird damage from 61 8 to 10 8 per cent 2 5 kg of the chemical is sufficient for one hectare which costs Rs 45 0 including application expenses

9 POTATO CULTIVATION ON HEAVY SOILS

Potato in heavy soils generally gives a poor yield of small deshaped tubers Farmers working with heavy soils can now look forward to cultivating potatoes successfully Further work done at this station has clearly shown that application of 25-30 quintal/ha of castor cake, 50% at sowing and 50% at first earthing can significantly increase the size and consequently the yield of tubers Varieties like S 555 and kufri chamatkar have done well Treatment of soil with sulphur and of seed tubers with aretan adds further to crop yields

10 SOYBEAN

The Department has started a research project on soyben cultivation Beginning has been made with screening of germ plasm obtained from different sources So far Bragg, Lee and Hill varieties of soybeen have done better than other material tried Trials on their response to P_2O_5 application and inoculation are under way

As a result of application of modern agricultural technology, food and fodder production on the Agronomy farm in the year under reference has been more than doubled of what it was 3 years back Some pertinent data are provided below —

Area of the farm upto 1966-67	=82 acres
Area of the farm during 1968-69	=67 acres
Income in Rs. during 1966-67	=35.799
Income from grain crops during 1961-69	Rs. 90,000.00

In addition, the college dairy was supplied with round the year green and dry fodder worth about Rs. 90,000/-

(b) Jobner Campus.

1. The centre has projects on herbicidal control, trace elements and agrostology.
2. The Department has an I.C.A.R. scheme on use of saline water and water use efficiency.
3. The Department has a N.S.C. hybrid brjra (pearl mellet) seed protection programme.

III. EXTENSION :

The Department delivered lectures to farmers, V.L.W's, DAO's AEOS etc. on the request of Department of Extension, Orientation Training Centre and Peace Corps Organisation of U.S.A. In addition, four extension bulletins were issued by the staff at Udaipur Campus and one from Jobner Campus which were published through college extension wing. Radio broadcasts on subjects of agricultural importance were also made.

List of Publications :

(a) RESEARCH PAPERS :

1. Bajpai, M.R.; Mertia B.S. and Porwal B.L. (1969) Effect of method of irrigation, frequency and mode of N application on production of barley. Paper read at 1st All India Symposium Soil and Water Management at Hissar.

2. Bajpai, M.R.; Singh R.M. and Porwal, B.L. (1969) Investigation into economy in water use by different methods of irrigation. Paper read at 1st Ind. Symp. Soil and Water management at Hissar.

3 Gupta, O P Studies on pre-emergence screening and mode of selectivity of experimental herbicide 1 (3,4-dichloropheny 1-1)-3 methy 1 2 pyrolidinone Mad Agril J 55 (1) 481-6, 1968

4 Gupta, O P Herbicidal control of grasses in wheat, barley and oat cereals Ind J Agron 13 (4) 1968

5 Gupta, O P Control of 2-4 D and MCPA resistant weeds other than grasses in small grain Ind J Aron 13 (4) 1968

6 Gupta, O P Herbicidal control in paddy fields World Crops Oct, 1968 pp 25-7

7 Jain, M M Gupta, O P and Singh R M Efficacy of ban application of linuron, simazine and EPTC in hybrid maize *Univ* Udaipur Res Studies Vol 4, 1966

8 Gupta, O P and Singh R M Response of unirrigated wheat to placement of graded levels of nitrogen *Madras Agri* J 1968

9 Gupta, P C and Jain, G L Gibberellin–A recent retrospect Labdev J Sci and Tech India Volume 6–B No 4 Oct, 1968, pp 212 222

10 Gupta P C, Singh H G and Trivedi, C P Studies on the relationship between time of sowing and distance of planting in maize, Univ Udaipur Res Studies, Vol 4, 1966

11 Jain G L and Singh, R M Effect of iron and zinc on nutrient uptake by paddy Labdev J Sci Tech 5 (2) 156-158 (1967) (Received commendation prize from editor)

12 Sharma, H C and Singh, R.M Effect of varying soil moisture regimes plant population and levels of nitrogen on maize Madras Agri J Nov 1968 55 (11) 492 97

13 Sharma, H C, Agarwal, J P and Duhan, S P S Response of cabbage to three plant specings and three levels of nitrogen Indian J Sci and Indust 1968, 2 (2) 69-71

14. Singh, H.G. Cross planting—A new method of intercropping legume wiht non-legume. Science and Culture. 34 : 305-306, July 1968.

15. Singh, H.G. A review of research work on irrigation and manuring of wheat Planters J. and Agriculturist. XLV No. 8 : 395-397, 1969.

16. Singh, H.G. Weedicides in India today. *Chemical Age of India* pesticides Special Vol. 19, No. 9, 770-774, 1968.

17. Singh, H.G. and Gupta, P.C. Nature and control of chlorosis in paddy seedlings on calcureous soils. Indian J. Agril. Sci. 38 (4) : 714-719, 1968.

18. Singh; H.G. and Porwal, B.L. Effect of chlorophenoxy herbicides on grain and stover production by sorghum. Labdev J. of Sci. and Technology. 6B No. 3, 151-154, 1968.

19. Singh, H.G. and Mehta, U.R. Response of maize to graded levels of N in heavy soils of Udaipur. Univer. Udaipur Res. Studies. IV : 1-6, 1966.

20. Singh, H.G. and Trivedi, C.P. Effect of different forms and levels of nitrogen on the yield of maize. Univ. Udaipur Res. studies, IV, 1966.

(b) EXTENSION BULLETINS :

1. Gupta, O.P. and Singh, H.G. Cotton (Hindi). Extn. Bull. No. 15 Directorate of extension, University of Udaipur, Udaipur.

2. Sharma H.C. Sugarcane cultivation (Hindi). Extn. Bull. No. 11. Directorate of extension, University of Udaipur, Udaipur.

3. Singh, H.G. Potato in heavy soils. Department of Agronomy, R.C.A., Udaipur University of Udaipur.

4. Trivedi, C.P. Wheat 227 (Hindi) Extn. Bull. No. 10 Directorate of extension, University of Udaipur, Udaipur.

5. Bajpai, M.R. Jeera (Hindi). Extn. Bull. No. 12 Director of Extension Education, Udaipur.

DEPARTMENT ANATOMY

1 No Post-graduate students were registered The Ph D problem, The Gross, histology and histochemistry of testes and pole glands of camel was in progress

2 Facilities for research work at advanced level are available in the Department, in the various fields of specialization like Histology, Histochemistry, Embryology and gross anatomy

3 No research scheme or any other facilities have been taken

4 Teachers Dr U B Singh

Articles —Studies on sympathetic nervous system in buffalo part I (Cervical part) has been published in Vety Journal Februry, 1969

Remaks —Skeleton of ostrich and lioness were also prepared by this department

DEPARTMENT OF ANIMAL HUSBANDRY

1 TEACHING AND ENROLMENT

The department was responsible for undergraduate and post-graduate teaching in Animal Husbandry Of the two students in M Sc (Ag) Final one was assigned to Jobner No admissions were made in M Sc (Ag) Previous The Department continued to be located in the congested Agricultural Experiment Station building

2 FACILITIES FOR TEACHING AND RESEARCH

(a) Animal Husbandry Farm

The Department maintains a research-cum instructional livestock farm which is also used to breed and disseminate superior livestock

The number of animals as on March 31, 1969 is given below

Class of Animals	Number of Animals	
Cattle (Gir and Rathi)	127	
Adult Cows		33
Young females below 1 year		18
above 1 year		29

Class of Animals		Number of Animals
Young males below 1 year		6
above 1 year		21
Adult males and Bulls		5
Bullocks (Nagori)		15
Buffaloes (Murrah)	78	
Adult Buffaloes		28
Below 1 year		10
above 1 year		24
Young males below 1 year		3
above 1 year		6
Bulls		5
Experimental male (local breed)		1
Goats (Sirohi)	7	
Adult She Goat		4
Female kids below 1 year		—
above 1 year		1
Male kids below 1 year		2
above 1 year		—
Sheep (Sonadi)	80	
Adult sheep		45
Females lambs below 1 year		12
above 1 year		09
Male lambs below 1 year		6
above 1 year		—
Rams		8
	Total	292

36 surplus animals including 4 Adult cows, 6 buffaloes, 2 Gir females calves, 6 buffalo male calves, 1 Rathi male calf, 9 rams and 6 eves were diposed by public auction for Rs. 5,850.00 to the progressive local breeders.

The Number of female animals completing lactating during year was as noted below —

Class of animals	Lactation number									Total
	I	II	III	IV	V	VI	VII	VIII	IX	
1 Gir cow	15	5	1	4	3	1	2	1	1	33
2 Murrah buffaloes	5	4	6	5	—	2	5	1	x	28
										61

MILK PRODUCTION AND SALE

A total of 86,368 50 litres milk was produced on the Farm during the year as compared to 71,992 25 litres in 1967-68 Sale receipts through disposal of milk and milk products has been Rs 75,661 96 which is about 20% more than the previous year Another amount of Rs 5,850 00 was obtained through sale of surplus livestock

The difficulty due to lack of provision for certain important farm structures, viz Siol pits, farm office, lavatories and living quarters for farm staff, continued Great difficulty was also experienced due to non-existence of budget head and budgetary provision there under for 'Repair and Maintenance of farm equipment', 'Veterinary medicines and 'Petty items' A meaningful livestock breeding programme could not be taken up for want of provision for purchase of bulls, improved breeds of goats and sheep

POULTRY FARM

The Poultry Farm handled this year about 9805 birds including 9519 poultry chicks 286 turkey poults were produced on the Farm during this year The number of birds sold was 7214 including 112 poultry chicks and 115 turkey poults A detailed record of and other information is as below

[illegible] 1-7-6[illegible]

	WLH	RIR	DESI	TURKEY	BROWN	CROSS	TO[TAL]
Hens	[illegible]	[illegible]	[illegible]	57	102	—	16[illegible]
Cocks	161	17	[illegible]	6	—	—	1[illegible]
Pullets	[illegible]	[illegible]	105	40	—	670	141[illegible]
Cockrels	73	44	60	41	—	—	21[illegible]
Chicks	[illegible]	257	231	68	—	2244	5271

(b) New addition during the year including Day-old chicks : WLH 259[illegible] plus 418 purchased; 469 RIR; 767 Desi; 286 turkey and 5237 crosses

(c) Other information—

	Poultry	Turkey
No. of eggs produced	4,94,095	3,550
No. of table eggs sold	4,70,985	2,157
No. of hatching eggs sold	11.933	30
No. of eggs set on farm	12,197	1,166
No. of day old chicks produced	9,520	286
No. of day old chicks sold	112	115

(d) Strength of birds on 30-6-69—

	WLH	RIR	DESI	CROSS	TURKEY	BROWN	TOTAL
Hen	681	178	74	348	67	63	411
Cock	41	18	3	—	23	—	85
Pullets	767	94	225	1814	—	—	2900
Cockrels	135	46	70	784	—	—	1035
Chicks	1086	148	104	401	9	—	1748
Total	2710	484	476	3347	99	63	7179

Production : A total of 494095 eggs were produced compared to 4,45,202 eggs produced last year. The Turkey eggs produced were 3,550 against 4,188 of previous year.

Income from sale of poultry produce

Adult	26 482 10
Chicks	8,375 41
Eggs	82,048 11
Other farm produce	2,063 76
Total	1,18,939 47

RESEARCH PROJECTS

PL 480 Research Project entitled " Effectiveness of different methods of utilizing available source of germ plasm in improving the productive performance of poultry ' was started from April 1,1966 consequent upon the grant of Rs 492,200 00 by the United States Department of Agriculture The research project involves evaluation of the productive performance & progress attainable through selective breeding in three starins of poultry, viz the native Desi stock (DD) and the improved White Leghorn (WW) and Rhode L Island Red (RR) stocks and their crocess with a view to determining the comparative merit of the Desi stock, the improved stock and the mixed stock having various proportions of native and improved blood under the local conditions

(i) The three strains were established in 1966 and productive per- formance tested during the following year The hen day egg production to 400 days' survival was 127 20 and 129 97 for two batches of WW, *112 24 and 122 97 for those of RR and 44 39 for DD*

(ii) Two batches each of control population and 2-way crosses were produced in 1967 68 (December, 1967 and March, 1968) December 1967—hatch completed production to 400 days' of age on January 25, 1969 and March 1968 hatch on April 15, 1969 Crossing in general decreased fertility and improved hatchability in crosses involving DD females compared to DD All crosses except that involving WW females and DD males performed better than controls upto 2 months of age as far as feed conversion was concerned the thereby showing heterosis for this trait Crosses involving DD females and WW or RR males showed,

considerable heterosis for feed conversion upto 5 months' age. Crossing in general improved viability during growing period particularly in crosses involving DD females.

The hen-day egg production to 400 days of survival pooled for the two batches was 121, 103, 62, 143, 83, 142, 107, 93 and 94 for WW, RR, DD, WR. *In 2-way crosses first letter denotes female and the second male,* WD, RW, RD, WR DR strains, respectively. Reciprocal crosses of WW & RR and RD showed considerable heterosis for egg production. RW performed best with performance efficiency index (PEI) of 29.05 closely followed by WR and WW with PEI of 28.58 and 28.05, respectively. PEI was lowest for DD at 14.14. Considerable improvement in egg number, egg size and feed conversion in crossing with exotic breed is the quickest method of improving indigenous (Desi) poultry. Better combning ability of RR with native poultry is apparent from the productive performance of DW, DR, WD and RD. However, RR also combines very well with WW.

Mortality during laying period was on the high side in all groups due to high incidence of spirochaetosis which particularly affected RR, RW with 14.42 per cent mortality was superior to others in this trait in December, 1967–hatch & DW with 14.30 per cent in March, 1968 hatch.

(iii) Matings for 3-way as well as 2-way crosses and controls were done in November, 1968 and eggs set in November-December, 1968. The hatchability of fertile eggs of all the six-3 way crosses in general was very high (range 89.09—93.01) as compared, to the six-2 way crosses (range 67.87—90.41) and three controls (range 60.55—84.63). WR-R in 3-way crosses first two letters denotes 2-way cross female parent and the third letter the pure breed male parent, pullets attained higher live weight with higher feed efficiency than all other groups at 2 months age. At 5 months' age also WR-R was superior to all groups except DD for feed efficiency with live weight being superior to all groups except RR and RW. Carcass study of males amongst among groups, at 12-weeks age revealed the superiority of two 3-way crosses, viz. WD-R and WR-D for live weight attained, dressed body weight, available edible portion and efficiency of fed conversion.

PAPERS PUBLISHED :

"Changes in nitrogen distribution in bovine rumen fluid with time after alternate feedings of alfalfa hay and corn silage with a Urea-containing concentrate"—V.V. Sharma and J.D. Donker, 1968. Indian J. Dairy Sci. 21, 65-74.

DISTINGUISHED VISITOR

Dr George R Johnson, Chairman, Department of Animal Science Ohio State University visited this University as a short term consultant in Animal Science between January 13 & February 23, 1969 on an assignment with USAID Dr Johnson visited University Farms and other facilities of the College of Agriculture, M B College and poultry and dairy units around Udaipur He had several conferences with the staff in Animal Husbandry and addressed the faculty in regard to research programme under operation at Ohio State University and careers in Animal Science His main recommendations in regard to organization of Animal Science in this University included maintaining a department each in the Agriculture and Veterinary sectors, dairy cattle nutrition, genetics, physiology and management forming part of Animal Science programme as distinct from dairy Science, integration of graduate level teaching programmes between campuses, general agreement on research programmes between campuses

DEPARTMENT OF ANIMAL SCIENCE

1 ENROLMENT

Post graduate

	Animal Nutrition	Nil
	Sheep Husbandry	Nil
	Animal Genetics	3
	(2 left the College during this period)	
Research	2 for Ph D	

2 RESEARCH FACILITIES AND AREAS OF INTEREST

Research facilities for post graduate work in Animal Nutrition are existing and research facilities in wool analysis and sheep breeding are being developed

3 RESEARCH PROJECTS/U G C SCHEMES/AND OTHERS SCHOLARS FIELD OF WORK

"Study of influence of environment of chicken in dry and hot regions "

4. RESEARCH PUBLICATIONS :

C.S. Mathur		Some Nutritive Aspects of "Cham-Ghas" (Corchorus-Reeuch) I.V.J., Vol. 44, No. 6, 1968.
	et al	Observations on the S-content of wool and its yeild associated with the S-content of the feed. Wool and Wollens Vol. VI, No. 1, 1969.
	et al	Observations on the S-content of graded wools. Wool and Wollens Vol. vi, No. 6, 1969.
S.P. Ohri & A.P. Vyas		Performance of Murrah bufalloes o in Arid Zone (1969) I.V.J. 46; 311.
Balbir Singh		Housing for Poultry—Indian Farming Dec. 1968.
Balbir Singh & V.S. Mehta		Floor space requirements of Whitelehorn Chicken. I.V.J. (1969) Vol. 46, No 12.
Balbir Singh		Poultry Development in Rajasthan. Food Farming and Agriculture. Vol. 4, No. 4, 1969.

Two students qualified for MVSc. in Animal Nutrition. The titles of the research work were:—

1. Nutritional evaluation of Sweet Sudan Grass 59-3.

2. Studies on the Nutritive aspects of some common fodder grasses of the Hill tract of Udaipur.

Four students qualified for MVSc. in Sheep Husbandry. The titles for the research work were:—

1. Biometrical study of characteristics at birth in Chokla sheep.
2. Effects of environmental factors on wool traits in Chokla Sheep.
3. Effect of Urea Supplementation with and without molasses on live weight and wool traits in Magra sheep.
4. Relationship between body and wool trait at yearling age in Chokla Sheep.

5 ANY OTHER NOTABLE FEATURE

Dr A L Choudhary joined the Department as Reader completing M Sc /and Ph D from U S A

Dr Madho Singh left for post-doctorate to U S A

Shri S P Ohri and Shri A P Vyas were working for Ph D degree

Post graduate Poultry Refresher Course was conducted

DEPARTMENT OF PATHOLOGY AND BACTERIOLOGY

ENROLMENT

Post Graduate Three candidates were enrolled for M V Sc (Previous) in Bacteriology

Research Two candidates submitted their theses for M V Sc (Bacteriology) At present 5 (including two ICAR Fellows) candidates are working for their Ph D degree in this department, and two have submitted their theses for Ph D (One staff member and one ICAR research fellow)

RESEARCH FACILITIES

Research fecilities are available in this department in Pathology and Bacteriology (including Immunology, Serology and Virology) upto Ph D level, with a well equipped tissue culture laboratory

The research workers for Ph D include two ICAR research fellows

One candidate from Afganistan is working for his Master's degree under Colombo Plan

RESEARCH PUBLICATIONS

The list of papers published during the period under report is as follow —

Papers Published

1 Preliminary report on Photosensitization in Cattle Jatkar, R. (1969), Ind Vety J 46 (4) 284 286

The detailed study of the biology of sulphur-selenium antagonism in two blue-green algae by Shri Ghyan Prakash working for his Ph.D. has contributed some entirely new information to our only previous knowledge of this aspect by Kumar (1964) and has provided a new convenient tool for those interested in investigating the sulphur metabolism of blue-greens. The adaptational and mutational studies of Shri R.S. Gupta, again working for his Ph.D. have considerably extended our knowledge of the factors operating in the chemical production of mutations and have added to the number of known list of rutagens in this group. The work of Miss M.B. Kaushik on the genetical and environmental factors involved in the control of cellular differentiation in nitrogen fixing blue-green was equally informative and has strengthened the view that blue-greens are obligate phototrophs not only in respect of their growth but also in respect of their differentiation and development. The works of Shri M.K. Singh on the inhibitors of nuclaic and metabolism and of Ghyan Prakash, M.B. Kaushik, B.S. Srivastava and H.N. Singh on the radiation damage and cell recovery have resulted in establishing the importance of metabolic inhibitors in elucidating the role of system-specific processes in rescuing the cells from lethal lesions.

The need and importance of these studies can reasonably be ascertained from the international acclaim they have received from the various top workers of this field, as evidenced by appreciative references in research and review papers and books published abroad.

CYTOGENETICS

(a) Breeding of Poppies :

Poppies are popular and wide spread ornamental plants, but we have neither a precise knowledge of the nature of their genetic system, nor a clear understanding of the evaluation of the garden varieties. A start has been made in this direction.

1. The establishment and study of reasonably representatives collection of cultivated types (sp.) from all over India as well as from abroad.

2. The examination of chromosome complements, hybridization experiments, analysis of chromosome pairing in the resulting hybrids supported by usual taxonomical procedures.

3 The extensive use of chemical mutagens (EMS, MMS) as well as ionizing radiation to produce gene mutations, chromosome breakages, translocations etc In the chromosome complexes of some species The aim is to acquire new characters and combinations of characters

4 Raising amphiploids to restore fertility

(b) Cytogenetic studies in forage grasses

The local grasses flora has been surveyed cynotaxonomically and several species with chromosome races have been discovered Effects of these *Cynodon*, *Paspalum*, Echinochloa have been given special attention because of their immense economic importance either as forage of minor milletes Incidentally a wide collection of Echinochloas has been secured and initial breeding programmes have been started

In the *Cynodon dactylon* complex, the synthetic triploids have been back crossed with the two parents and plants with two parents and plants with variable chromosome number (also differing in morphology) have been obtained

(c) Genetic System in some weeds

Weeds such as Argemone and Chenopodium are being intensively studied to unravel their genetic system in order to suggest a biological weeds eradication programme In addition speciation in the genus Argemone is also underway

(d) Research Publications by the staff members, 1968

1 Vyas, L N and Kumar, H D Studies on the phytoplankton and other algae of Indrasagar Tank, Udaipur, India *Hydrobiologia* 31 : 421-434 (1968)

2 Kumar, H D Mutation studies in the Blue-green algae *Anacystis nidulans Proc XII Internat Congr Genetics*, Tokyo, 1 84 (1968)

3 Gupta, R S and Kumar, H D Blue-green algal flora of Udaipur and its neighbourhood, *Reveu Algologioue* (Paris), N S 91-105 (1968)

4. Kumar, H.D. and Singh, H.N. Genetics of Cyanophyta, Intenat, Sympos "Role of Genetics Today", Osmania University, Hyderabad. September, 1968.

5. Srivastava, B.S. and Kumar, H.D. Pigment variation in Ultra-violet treated strains of the blue-green alge *Anabaena variabilis*. Internat. Sympos. "Role of Genetics Today", Osmania University, Hyderabad. September, 1968.

6. Kumar, H.D. and Singh, H.N. Studies on the algae of certain habitats endemic to Rajasthan. Sympos. "Natural Resources of Rajasthan". University of Jodhpur, 1968.

7. Kumar, H.D. Inhibitory action of the antibiotics Mitomycin C and neomycin on the blue-green alga *Anacystis nidulans*. *Flora* Abt. A, 159 : 437-444.

8. Singh, M.K. and Kumar, H.D. Action of hydroxyurea on the blue-green alga Anabaena variabilis. Flora, Abt. A, 159 : 445-450 (1968).

9. Kumar, H.D. Action of Mutagenic chemicals on *Anacystis nidulans*. II. Ethyl mathene sulfonate. *Beitrage zur Biologie der Pllanzen*, 45 : 161-170 (1968).

10. Kumar, H.D. Action of Mutagenic chemicals on *Anacystis nidulans*. III. N-methyl-N'-nitro-N-nitrosoguanidine Archiv fur Microbiologie 63 : 95-102 (1968).

11. Malik, C.P. Desynapsis and formation of restitution nuclei in Lolium multiflorum X *Festuca arundinacea hybrid*. *Pont Acta Biology*, 10 : 99-108 (1968).

12. Malik, C.P. and Grover, I.S. Cytological relationships in the *Convolvulus* pluricaulis complex. *Genetica, 39* : 250-256 (1968).

13. Tripathi, R.C. and Malik, C.P. The B-chromosomes of Festuca arundinacea (2n-28). *Genetic Iberica*, 20 : 217-222 (1968).

14 Grover, I S and Malik, C P Argemone mexicana 1 forma biocarpa (Green), G B Owrb—A new record from India Ind Forester, 95 123 124 (1968)

15 Malik, C P and Tripathi, R C Cytogenetical evolution within the *Cynodon dactylon* complex Biol Zentral, 87 625 627 (1968)

16 Malik, C P and Tripathi, R C Polyhaploid and genomic structure of tall d fescue (*Festuca arundinacea* Sch, 2n 42) Abst International Symposium 'Role of Genetics Today, held at Hyderabad, September, 1968

17 Singh, H N Effect of Acrillavine on ultra violet sensitivity of normal ultra violet sensitive and ultra violet resistant strains of Blue-green alga *Anacystis nidulans* *Radiation* Botany, 3 355 361 (1968)

18 Singh, H N, Kumar, H D and Ghyan Prakash Postirradiation modification of UV Secsitivity of normal and nitrofurazone resistant strains of the Blue green alga *Anacystis nidulans* Radiation Botany, Vol 9 (1968)

19 Singh, H N and Kumar, H.D Radiation damage and cell recovery in Blue green algae In International Symposium on 'The Role of Genetics Today, Osmania University, Hyderabad, September, 1968

BOOK

1 Ramdeo, K D Contribution to the flora of Udaipur Southeast Rajasthan, Published by Om Publishing House, Bhupalpura, Udaipur (book), 1968

OTHER NOTABLE FEATURE

1 During the period under review several seminars were arranged by the members of the staff A plant collection trip to Pachmarhi (M P) was arranged by the Department

2 Professor H D Kumar was invited to participate in the XIIth International Congress of Genetics held in Tokyo in August, 1968 He attended this Congress as a delegate of the University of Udaipur and

presented a paper entitled "Mutation Studies in the Blue-green alga *Anacystis nidulans*."

3. The Department of Botany sent a big contingent of workers to the International Symposium on "The Role of Genetics Today" organised by the Osmania University Hyderabad in celebration of their Golden Jubillee. The following persons attended this Symposium and presented the paper mentioned against their names :

(a) Prof. H.D. Kumar
1. "Genetics of Cyanophyta"
2. "Pigment variation in ultraviolet treated strains of the blue-green alga *Anabaena variabilis*."

(b) Dr. C.P. Malik
"Polyhaploid and genomic structure of tall fescue (Festuca arundinacea Soh; 2n-42)."

(c) Dr. H.N. Singh
"Radiation damage and cell recovery in Blue-green Algae."

4. The University Department of Botany, Delhi University, invited Professor H.D. Kumar to give a course of Five Extension Lectures on Physiology and Biochemistry of Algae. The following lectures were accordingly delivered in September, 1968.

1. Nitrogenmetabolism and nitrigen fixation in g algae.
2. Physiology of differentiation in algae.
3. Cellular organization in algae.
4. Pigmentation in algae.
5. Photosynthesis in algae.

These lectures were followed by a sixth general session in which Professor Kumar discussed a number of questions pertaining to different aspects of Phycology.

5. Professor Kumar also delivered the following two Extension Lectures at the School of Studies in Botany, Vikram University, Ujjain,. in February, 1960.

1. The Genetic Code.
2. Nitrogen fixation in blue-green algae.

DEPARTMENT OF CHEMISTRY

ENROLMENTS

M Sc Previous	15
M Sc Final	13
Ph D	6

AWARD OF Ph D DEGREE

(a) The following persons who worked with Professor G V Bakore have been awarded the degree of Ph D of the University of Jodhpur

(1) Shri Ram Dayal

(2) Shri D L Mathur

(3) Shri R M Kastia

(4) Shri K K Banerji

(5) Shri V B Moghe

(b) The Ph D thesis entitled "Kinetics of the Oxidation of some-L-Hydroxycarboxylic Acids by Hydrogen peroxide catalysed by Iron (II) ' Presented by Shri V R Dwivedi has been accepted for the award of Ph D degree of the University of Udaipur Shri Dwivedi worked with Professor Bakore

PUBLICATIONS

(1) Specific Ratio for Oxidation of Lactic Acid and Lactate by Peroxydisulphate catalysed by Silver (I) G V Bakore and S N Joshi Current Science 37 (1968), 346

(2) Kinetics and Mechanism of Oxidation of 1 3 Propane Diol by Peroxydisulphate catalysed by Silver (I) G D Menghani and G V Bakore Current Science 37 (1968), 641

(3) Kinetics of the Oxidation of some substituted Benzyl Alcohol by Vanadium (V) G V Bakore and Rama Shanker Indian Journal of Chemistry 6 (1968), 699

(4) Kinetics of the Oxidation of Pinacol of Peroxydisulphate Catalysed by Silver (I). G. D. Menghani and G. V. Bakore Bull. Chem. Soc. Japan 41 (1968), 2574.

(5) Kinetics of the Oxidation of Lactic Acid by Hydrogen Peroxide catalysed by Iron. (II). G. V. Bakore and Vijay Raj Dwivedi. Indian J. Chem. 6 (1968), 651.

(6) Kinetics and Mechanism of Oxidation of 1:3 Butane Diol by Peroxydisulphate catalysed by Silver (I). G. D. Manghani and G. V. Bakore. Z. Physik Chem. (New Folge), Frankfurt 61 (1968), 220.

(7) A Product Study of Oxidation of Lactic Acid by one and Two Electron Oxidants. C. L. Jain, Rama Shanker and G. V. Bakore. Indian J. Chem. 7 (1969), 159.

(8) Chromic Acid Oxidation of Oxalic Acid–I Kinetic Investigation of the Uncatalysed Oxidation of Oxalic Acid by Chromic Acid. G. V. Bakore and C. L. Jain. J. Inorg. Nucl. Chem. 31 (1969), 805.

(9) Chromic Acid Oxidation of Oxalic Acid–II Kinetic Investigation of the Manganesed (II) Catalysed Oxidation of Oxalic Acid by Chromium (VI). G. V. Bakore and C. L. Jain J. Inorg. Nucl. Chem. 31 (1969), 2527.

RESEARCH :

(a) Shri C. L. Jain completed his experimental work on Chromic acid oxidations.

(b) Shri S. K. Benerji completed his experimental work on lead tetra acetate oxidation.

(c) Shri S. L. Sharma is continuing his work on oxidations by Vanadium (V).

(d) Shri M. S. Murdia is continuing his work on oxidations by manganese (III).

(e) Shri G. K. Sharma is continuing his work on Physico-Chemical studies on metal ion complexes.

(f) Shri M S Kelkar is continuing his work on oxidations by vanadium (V)

(g) Mrs K Goswami is continuing her work in the CSIR Scheme "Studies on Chelate Polymers PFHS etc of N Aryl (or alkyl) azo hydroxyl amines' with Dr D N Purohit

(h) Shri A A Bhalekar joined the Department as UGC Research Scholars He is working on Chromic acid oxidations

SUMMER INSTITUTE

A Summer Institute in Chemistry for College Teachers was organised by the Department from 12 5 69 to 21 6 69 This Institute was organised with the support of U G C, National Council for Science Education, U S National Science Foundation and U S Agency for International Development Professor Joseph B Morris of Howard University Washington D C acted as consultant to the Institute A sum of Rs 36000/- was made available by the U G C for the Institute programme

VISITORS TO THE DEPARTMENT

(a) Professor S Ghosh D Sc, F R I C, F N I Professor of Chemistry, Jabalpur University visited the Department in October 1968

(b) Professor N R Dhar visited the Department on 27 1-1969 and addressed the staff and students of the Department

(c) Professor Robert A Shaw D Sc (London), F R I C, Professor of Chemistry, University of London, Birkbeck College, London visited the Department on 16 2-1969 and gave a lecture on 'Phophazines'

(d) Professor M Sentappa, Professor of Physical Chemistry delivered two lectures—(i) Photochemistry of uranyl salts and (ii) e s r spectroscopy—on March 16 and 17, 1969 These lectures were arranged under the U G C extension lecture programme

(e) Professor James B Morris, Department of Chemistry, Howard University (12 5 1969 to 21 6 1969) Summer Institute

(f) Professor Bakore was invited by the University of Poona to give a course of lectures on "Chemical Kinetics' He continued his membership of research degree committee in Chemistry of the Indore University He also continued to function as Dean of the Post Graduate Studies 31 3 1969

DEPARTMENT OF COMMERCE

ENROLMENT :

Post-graduate	Previous—22 Final —21
Research	five candidates working for Ph.D. degree of the University on subjects noted against each.

1. Shri R.L. Sharma	—	Industrial Labour in Organised Industries in Rajasthan.
2. Shri A.M. Lunia	—	Population and Food Supply in Rajasthan.
3. Shri M.L. Dashora	—	Tribal Economy of Southern Rajasthan.
4. Shri V.K. Jain	—	Economic Planning in Rajasthan.
5. Shri J.S. Saxena	—	Industrial Development of Rajasthan.

RESEARCH PROJECT :

R.P.C. Planning Commission's Research Project entitled "Udaipur City : Trends in Urbanization" is in progress under Dr. C.B. Mamoria.

RESEARCH PUBLICATIONS :

Teachers :

1. Dr. N.L. Hingorani.
   - (a) "The nature of Budgetary Control and the Evolution of New Estimating Techniqes—Institute of Chartered Accountants —October, 1968.
   - (b) "Director's Report in Published Accounts" Finance and Commerce—December, 1968.
   - (c) "Role of Self-Help Cooperative in Housing" Symposium on Housing, N.B.O. February, 1969.
   - (d) "Cost Audit and Propriety Audit under the Companies Act" —Company Law Journal—April, 1969.

2 Dr C B Mamoria

(a) "Conservation of Soil Resources '-Kadhi Gramodhyog Bombay, July, 1968, pp 679 687

(b) "The Rape of the Earth' -Khadi Gramodhyog, Bombay, December, 1968, pp 276-296

(c) Economic and Commercial Geography, 1969

(d) Organisation and Financing of Industries in India, 1968-69

(e) Agricultural Problems of India, 1968 69

3 Dr N D Gupta

(a) "Accountancy in Ancient India -Finance and Commerce, March, 1969

(b) "The Question of Half Yearly Accounts -Finance and Commerce, 1969

4 Dr P C Tripathi

(a) "Profitability of Public Undertakings -Modern Review

5 Dr P K Srivastava

(a) "Prospects of Indian Joint Ventures Abroad -Commerciun Jaipur, Vol IV, Part-I January, 1968

Dr N L Hingorani served on the Faculty of Course on "Pul Accountability in a Developing Economy" for Senior Finance Execut Organised at Bangalore in October, 1968 by the Institute of Chart Accountants of India He also presented a paper to the All India ference of Company Secretaries held at Calcutta in April, 1969 on of Cost Audit

DEPARTMENT OF DAIRY SCIENCE

ENROLMENT

(a) Post Graduate 8

M Sc Research Projects

1 Regional Variations and effect of Temperature of classifi the Physico-chemical contents of ghee

2 Manufacture of Winter butter from buffalo cream

3. Studies on the composition of milk of Gir cows and Murrah buffaloes.

4. Studies on the effect of $H_2 0_2$ on the keeping quality of market milk.

5. Identification of micro-organisms in Pasteurized milk.

6. Some factors affecting the quality and shelf-life of Khoa.

7. Bacteriological studies on Commercially Pasteurized Milk kept at various temperatures.

(b) Ph.D. Scholars : Five students were working for Ph.D. in the Department and one more candidate was registered during the year.

Ph.D. Projects :

1. Studies on Coliform bacteria in dairy and food products.

2. Studies on Enterococcus bacteria in dairy and food products.

3. Preparation of Commercial rennet from different plant sources.

4. Manufacture of cheese from buffalo milk.

5. Studies on in-pack processing of milk.

6. Studies on salt balance, and copper and Iron contents in milk.

RESEARCH FACILITIES AND AREAS OF INTEREST :

The department is at present housed temporairly in Agricultural Chemistry Research Laboratory building of the Agricultural Experiment Research Station. There is acute shortage of laboratory, store, and office space. With the availability of I.C.A.R. funds during the last two years under laboratory grants, the laboratory equipments and supplies position in the department has improved to some extent, but more funds will be needed to develop the department along proper lines. The construction of the new laboratory building will go a long way in establishing proper facilities for teaching research, and extension.

The department is interested in developing facilities carrying on investigations on bacterial quality of processed milk, packing of milk and milk products, standardization of techniques for the manufactures of indigenous milk products, and in the development of new dairy products.

3 RESEARCH PROJECTS/U G C SCHEMES AND OTHER SCHOLARS FIELD OF WORK.

(a) A P L-480 Research Project entitled "Significance of enterococci and coliform bacteria in the dairy and food products has been running since Sept 27, 1967

(b) One I C A R Fellow is working on In-pack processing of milk in polyethylene containers since March, 1968

(c) During the current year one U G C fellowship has been sanctioned to one scholar to work on 'Standardization of technique for the manufacture of paneer '

4 RESEARCH PUBLICATIONS

Six papers were published from the department during the year 1968-69

5 PILOT MILK SUPPLY SCHEME

The Pilot Milk Supply Scheme attached to the department primarily as an educational venture was able to run on a non-profit-no-loss basis during the year 1968-69

DEPARTMENT OF DRAWING & PAINTING

(1) Rajasthan Lalit Kala Awards were won by the following five persons of the Department —

1 Shri Shail Kumar Choyal—(Fellow)—Graphic

2 Shri Laxmi Lal Verma—(Staff)—Painting

3 Shri Vidya Sagar Upadhyaya—(M A F)—Painting

4 Miss Surjeet Kour—(M A Ex)—Graphic

5 Shri Bhagwan Dutta Dube—(M A Ex)—Painting

(2) One-man show of Paintings Graphics and Drawing was given by Shri P N Choyal in Delhi 27th Oct to 2nd Nov 1969 It received good review in leading papers like 'Hindustan Times', 'Times of India', 'Statesman', 'Nav Bharat Times', 'Dinman', 'Indian Architecture' etc

(3) Group show of the department was given at Information Centre Jaipur, opened by Honourable Minister Shri Hardeo Joshi and visited by many ministers and others V.I.P.'s—the favourable reviews appeared in 'Rajasthan Patrika', 'Rashtradut' and other local papers etc.

DEPARTMENT OF ECONOMICS

ENROLMENT :

Post-graduate—61

Previous—34
Final—27

Research—5

Old—4
Fresh—1

Shri B.S. Murdia's thesis on 'Mechanized Farming in Rajasthan' was approved and Ph.D. was awarded in January, 1969. Shri R.N. Tewari's Thesis on 'Agricultural Development and Population Growth in U.P.' was approved. Other scholars continued to make satisfactory progress.

RESEARCH FACILITIES AND AREAS OF INTEREST :

Dr. B.K. Tandon was the only approved Supervisor during the year. Areas of interest include Labour Economics, Agricultural Economics, Economic Development, Population problems, Community Development. The Department had one U.G.C. Research Scholar.

RESEARCH PROJECTS :

(a) Research Project on "Economic Viability of Farms in Udaipur District" sponsored by the Planning Commission was completed and report submitted in December, 1969.

(b) Research Project on "Impact of Community Development on Agricultural Production in Udaipur District" was sanctioned by the U.G.C. A grant of Rs. 12,000/- was made. Work could not be started as Dr. Tandon was abroad.

RESEARCH PUBLICATIONS

Five papers were published during the year by the members of the Department They are listed below

1 Dr B K Tandon & Dr B S Murdia	The small Farmers in Rajasthan published in problems of Small Farmers Seminar series VII issued by Indian Society of Agricultural Economics Bombay, 1968
2 Dr B K Tandon & Dr B S Murdia	'Cost Reduction Through Farm Mechanization Rural India, November, 1968
3 Dr B S Murdia	'Tax on Agricultural Inputs' Rural India—May June, 1969
4 Shri B L Dhakar	'Housing Employment and Economic Growth, Published Symposium Vol National Buildings Organisation, New Delhi
5 Shri B L Dhakar	"Resource Mobilization and Planning in Rajasthan', paper presented at the Rajasthan Economic Conference, Jaipur, 1968

OTHER NOTABLE FEATURES

Dr B K Tandon worked at the Institute of Industrial Relations, Madison, Wisconsin, U S A under the Fullbright Programme on a 10 month assignment

Shri G G David attended the Rajasthan Economic Conference at Jaipur

Shri B L Dhakar attended the All India Economic Conference at Hyderabad in December, 1968 and a Symposium on Housing organised by the B National Building organisation of the Government of India *for ECAFE region at Delhi in March, 1969*

DEPARTMENT OF ENGLISH

ENROLMENT :

(a) Post-graduate	23
(b) Research	5

COURSE OF STUDY :

Post-graduate Studies in English Literature.

RESULTS :

M.A. (Final)	100%
M.A. (Previous)	71.4%

RESEARCH PUBLICATIONS :

Teachers :

1. Shri B.B. Paliwal :

(a) "Symbolic Imagination and Dhvani" : *Principles of Sanskrit Criticism*, Ed., Dr. R.C. Dwivedi (Delhi, 1969).

(b) "Ezra Pound on Tradition" : *Studies in English :* (Udaipur, 1969) Published by the Department of English.

(c) "T.E. Hulme's Poetics" : *The Literary Criterion.* (Winter, 1968).

(d) "Tradition and Dissociation of Sensibility" : *The Aryan Path* (Nov. and Dec., 1968).

2. Shri S.B. Mathur :

(a) "Animal Imagery in Lawrence's Women in Love", *Studies in English* (1969), Department of English.

(b) Read a paper on "The Great Gatsby : A study in Tension between Dream and Reality", at the All India English Teacher's Conference, Bangalore, (Dec. 29-31, 1968).

3. Shri Chirantan Kulshrestha :

1. Articles :

(a) "The Valley of Ashes : An Enquiry into the tragical possibilities of Hardy's *Jude the Obscure*", *Modern Review*, March, 1968.

(b) "Modern Revolution in Art and Literature A Question of Influence", *Thought*, April 6, 1968

(c) "The Novels of Saul Bellow", *Bindu*, April June, 1968

(d) "The Fable of a Novel *Story of O*', *Thought*, August 31, 1968

(e) "The Leash and the Ego A Study of Pauline Reage's *Story of O*", *Studies in English*, Vol I, No 1, 1969

(f) "In Defence of Jainendra Kumar", *Indian Writing Today, No 8*, 1969

(g) The Lone Wanderer and the Dark Wood A Reading of Lionel Trilling s *The Middle of the Journey*, Submitted at the Advanced Seminar in American Literature, American Studies Research Centre, Hyderabad, April-May 1969

2 Translations

(a) "Three Poems of Allen Ginsberg", *Lahar*, October 1968

(b) "Four New Voices in British Poetry", *Bindu*, July-September 1968

(c) "Jeanne Kyger's Poem", *Aarambh*, Oct 68-Jan 69

3 Book Reviwes

(a) "Visthitian', *Bindu*, July-Sept 1968

(b) "A Juvenile Attitude Norman Mailer's *The Armies of the Night*", *Thought*, July 12, 1969

(c) "A Mode of Enquiry Jainendra Kumar's *Anantara* , *Thought* June 7, 1969

(d) "Our American Studies , *Thought*, Sept 13, 1969

4 General

"Non-violence and the World of Tomorrow", Paper read at the seminar on "Non violence and Social Reality" organised by the Gandhi Peace Foundation, January 1969

SEMINARS AND RESEARCH WORK :

(a) Participated in the Advanced Seminar on American Literature at the American Studies Research Centre, Hyderabad, April-May 1969.

(b) Worked at the ASRC on a Teacher Study Grant from May 1969 to June 1969.

(c) *Worked at the ASRC on a Research Fellowship from December 1969 to April 1970.*

DEPARTMENT OF EXTENSION EDUCATION

The department of Extension Education performed the three important functions viz. campus teaching, off campus training and research work.

ON-CAMPUS TEACHING :

The following courses were offered to the undergraduate and Post-graduate classes:—

UNDER GRADUATE COURSES :

1.	Ext. Edu. 201	Indian Rural Society.
2.	Ext. Edu. 202	Programme planning and evaluation.
3.	Ext. Edu. 301	Fundamentals of Extension Education.
4.	Ext. Edu. 301	Extension Teaching methods (By appointment).

COLLEGE OF HOME SCIENCE :

5.	Misc. 100	Psychology.

Besides the above courses, five courses were offered in General English for the students of R.C.A. and two courses were offered for the students of CTAE.

POST-GRADUATE COURSES :

M.Sc.Ag. (Prev.) :

1.	Ext. Edu. 601	Extension and Community Development.
2.	Ext. Edu. 621	Leadership Development.

3 Ext Edu 622	Determining Extension Programme
4 Ext Edu 623	Extension Teaching Methods
5 Ext Edu 642	Principles of Sociology
6 Ext Edu 605	Extension Psychology (By appointment)

M Sc Ag (Final)

1 Ext Edu 644	Social and Educational Research

Courses in Extension Education were also offered to the student of CTAF and in sociology to the students of the college of Home Science There were six students in M Sc Ag Prev and four students in M Sc Ag Final

OFF CAMPUS TRAINING

In order to provide field experience and to acquaint the students with the field activity and rural life both the under graduate and post-graduate students were sent to the villages to organise demonstration, arrange film show, exhibition, launch campaigns and attend the village panchayat meetings etc

RESEARCH WORK

The following research projects were undertaken by the students of M Sc Ag Extension

1 Impact of Applied Nutrition programme on Eating Habits in Panchayat Samiti Girwa, District Udaipur

2 Diffusion of high yielding varieties in panchayat samiti Badgaon, District Udaipur, Rajasthan

One student is working for his Ph D on the following topic

' Effectiveness of Audio Visual Aids in the Adoption of Improved farm practices

The researches on "Diffusion of Innovations' were compiled by Dr S L Mathur and was presented in the Annual conference of the Indian Society of Extension Education held at Banglore in May, 1969 The list of the other publications brought out by the members of teaching staff is given below —

1 Dr S L Mathur	Innovation Diffusion Research A Review
2 Shri S L Intodia and Shri Zabardan Kavia	Care of Chicken

DEPARTMENT OF GEOGRAPHY

1. Enrolment	(a) Post-graduate 38 (b) Research 9
2. Results	(i) M.A. Previous 90.47% (ii) M.A. Final 100%
3. Research :	One of the research Scholars has almost completed his work. Areas of interest comprise of land-use, settlement geog. and urban geog.
4. Scholarships & Loans	National Research Loan amounting to Rs. 125.00 p.m. to one of the research scholars.
5. Library facilities	Total number of books in the college library—1594. Total number of books in the departmental library—439. Dissertations—22. Current journals subscribed by the Department—16. Back volumes of Indian Journals-3. Back volumes Geographical Journals-66 (London). Wall maps, Charts and Models 256 Atlases—22. Toposheets—193.
6. Conferences and Seminars attended	Dr. A.N. Bhattacharya and Dr. N.L. Gupta attended the main session of the 21st International Geographical Congress held at New Delhi from 1st to 8th Dec. 1968.

DEPARTMENT OF GYNAECOLOGY AND OBSTETRICS

1 Enrolment Post graduate—Four students registered for M V Sc Obstetrics and Gynaecology

2 Research facilities and areas of Interest
Limited Research facilities are available
The chief interest is in the reproduction of
He and She camel and ovine reproduction

3 Research projects/U G C Scheme etc Nil

4 Research publications

(a) Pareek *et al* Some student on lactic acid content of semen and blood of sheep Indian J of Animal Science, December, 1969

(b) Pareek *et al* Some studies on the role of ascorbic acid and its congeners on the semen quality of ram Indian Vet J 1970, January

Four students qualified for M V Sc Gynaecology with the research project Thesis titles as follows —

(1) Study of Biometry of Genital organs and accessory Sex glands of male Bikaner Sheep and Marwari Goats

(2) Studies on viscosity, preservation and dilution rate of Ram seman

(3) Morphology of spermatozoa from the Fpidedymis of the Camel (Camelus Dromadaris)

(4) Studies on oesforus and ovalation with special reference to vaginal cytology and endometrial Histology

DEPARTMENT OF HINDI

1 ENROLMENT

Post-graduate	M A (Previous)	—	38
	M A (Final)	—	17

2 Research facilities are available in the form of library consultation where many back and rare numbers of important magazines are to be

found. Our students carry out research work in the Libraries at Nathdwara and Kankroli also and they have started preparing a catalogue.

Eleven students are engaged in research work in the various fields of Hindi Literature-ancient, medieval and modern.

Research students working under Dr. Dev Raj Upadhyaya :

1. Mrs. Sneha Ananda
2. Shri N. Sreedharan
3. Shri Naval Kisore Sharma
4. Shri Rajendra Sharma

Under Dr. K.C. Shrotriya (Retd.) :

5. Shri N.N. Joshi
6. Shri Puri
7. Shri Ameta

Under Dr. R.G. Sharma, 'Dinesh' :

8. Shri Ramji Lal Sharma
9. Mrs. Rekha Sharma
10. Mrs. Vasudha Durge
11. Mrs. Urmila Dube

3. Published Books and papers of Teachers :

1. Dr. R.D. Upadhyaya—The Psychological study of Jainendra's Novels.

2. Dr. R.G. Sharma—अहं मेरा गेय

3. Shri N.N. Joshi—Articles :

(अ) अरविन्द दर्शन—परिषद् पत्रिका, पटना ।

(ब) अरविन्द की काव्य दृष्टि—सप्त-सिन्धु, चंडीगढ़ ।

4. Dr. R.G. Sharma—Articles :

(अ) सुरति मिश्र का अजात साहित्य-परिषद् पत्रिका, पटना ।

(ब) बिम्ब सिद्धान्त—सप्तसिन्धु, चंडीगढ़ ।

(स) प्रतिबद्धता और साहित्यकार की भूमिका—मधुमती, उदयपुर।

(द) हिन्दी काव्य मे महाराणा प्रताप—प्रताप स्मृति ग्रन्थ, साहित्य सस्थान, उदयपुर।

(च) हिन्दी पूर्व शिव काव्य परम्परा—साहित्यिक अनुसधान के प्रतिमान, उदयपुर विश्वविद्यालय।

(छ) प्राच्य एव पाश्चात्य काव्य शास्त्र मे बिम्ब सिद्धान्त।

(ज) शिव का दार्शनिक स्वरूप—शोध पत्रिका, उदयपुर।

(झ) सामाजिक दायित्व और रचनाकार का सकट से सम्बन्धित परिचर्चा मे निबन्ध बिन्दु, उदयपुर।

(ण) रचनात्मक पत्र पत्रिकाओ मे लगभग २० अन्य रचनाएँ।

(त) विश्वविद्यालय की शोध पत्रिका 'अध्ययन और अन्वेषण (साहित्यिक अनुसधान के प्रतिमान) का सम्पादन सहयोग।

5 Dr K K Sharma

(अ) लोकगाथा मे अतिमानवीय तत्व—परिषद् पत्रिका, पटना।

(ब) कथानक रूढि-सम्मेलन पत्रिका।

(स) नई कविता—बिन्दु।

(द) वगडावत।

6 Dr A S Khan

(अ) वश भास्कर — मधुमती', उदयपुर।

(ब) वश भास्कर साहित्यिक अध्ययन—शोध पत्रिका, उदयपुर।

(स) वश भास्कर और इतिहास–नागरी प्रचारिणी पत्रिका, काशी।

(द) सूर्यमल्ल व्यक्तित्व एव कृतित्व–परिषद् पत्रिका, पटना।

(च) वश भास्कर शैली सौष्ठव–परम्परा, जोधपुर।

(छ) सहित्य के सदर्भ मे परम्परा और प्रगति।

7 Shri N K Sharma

(१) 'साप्ताहिक हिन्दुस्तान' (२) 'कल्पना' (३) 'मधुमती' (४) 'बिन्दु' (५) 'वातायन' (६) लहर' (७) 'सचेतना' (८) 'आलोचना' (९) 'माध्यम' (१०) 'क, ख, ग' आदि म लेख प्रकाशित। (११) 'शाति निकेतन से शिवालिक' ग्रन्थ मे।

8. Shri P. Atur

इनके भी लेख 'विन्दु', 'मधुमती' में प्रकाशित हुए हैं।

There is a great need of separate cabins for research students where they can cevotc themselves to their work.

DEPARTMENT OF HISTORY

1. Enrolment :	(a) Post-graduate	28
	(b) Research	10

2. Research facilities need further enlargement. Primary area of interest : History of Rajasthan.

3. The following teachers attended different conference mentioned against each :

(a) Prof. B.S. Mathur

(i) Indian History Congress.

(ii) Rajasthan History Congress.

(b) Dr. L.P. Mathur

Rajasthan History Congress.

(c) Dr. K.S. Gupta

Rajasthan History Congress.

4. (a) The Department has been entrusted by the U.G.C. with a Research Project on the History of Mewar under the Directorship of Prof. B.S. Mathur.

(b) An individual research grant was also given by the U.G.C. to Prof. B.S. Mathur to conduct a local historical survey.

5. Research Publications :

Prof. B.S. Mathur—

An article to the Journal of Rajasthan Historical Research Institute entitled "Kesari Singh Kothari—A Study."

Dr. L.P. Mathur—

(i) "Panjab University—its origin and Objects."

(ii) "Indian revolutionary movement in the U.S.A."

Dr K S Gupta—
"Selections from Banera Archives"

Dr S B P Nigam—
"Nobility of Delhi Sultanate"

DEPARTMENT OF HORTICULTURE

The department of horticulture has a farm of about 50 acres, where numerous fruits viz, citrus, pomegranate, guava, peach, plum, grape, fig, mulberry, and vegetables viz, cruciferous, cucurbitaceous and solanaceous, beans, spinach, etc are cultivated It has also an ornamental section which serves the important purpose of imparting instructions to students in ornamental gardening, besides giving an opportunity to outsiders to see different types of shrubs, seasonal flowers and roses The department has a beautiful out-standing collection of about 490 varieties of roses and 250 varieties of cacti. Three varieties of grape for commercial cultivation have been established on the farm and bower for their training has been almost completed Besides ful filling the job of teaching and research, department also maintains the campus gardens which includes lawns and ornamental section, rosery, nursery, hostel compound, and conservatory, covering an area of about 6 acres The nursery of fruits, vegetables, annuals and ornamental plants is doing exceedingly well and rendering useful service by supplying true to type plants to the citizens A small vegetable shop is also maintained by the department near the gate of T S V Hostel to supply fresh fruits and vegetables to the members of the faculty The total sale from the farm was to the tune of Rs 17653 25

TEACHING

The department imparts instructions to under-graduate and post-graduate students The post-graduate courses offered by the department, number of students enrolled and passed are given below —

Enrolment	Course No	No of students enrolled	No of students passed
Nursery Husbandary	Hort 601	7	7
Fruit Production	Hort 603	7	7

Enrolment	Course No.	No. of students enrolled	No. of students passed
Principles of Vegetable Production	Hort. 641	6	6
Landscape gardening	Hort. 623	3	3
Ornamental Horticulture	Hort. 622	3	3
Principles and methods of Preservation	Hort. 681	5	5
Seminar	Hort. 691	6	6
Special problems	Hort. 692	3	3
Research	Hort. 693	3	3

For post-graduate studies in the subject five students were admitted in July, 1968. Out of them one left; of remaining four, three are working on their research problem at this campus and one at Jobner. Besides guiding students, members of the staff took active part in trainings organized by the Directorate of Extension to impart instructions to Village Level Workers, Agricultural Extension Officers, ladies in the applied nutrition programme etc. They were acquainted with the latest techniques of propagation, improved techniques of vegetable production problems in the cultivation of fruits and their remedies, rejuvenation of orchards, construction of bower for training grapes and preparation of preserved products like jam, jelly, marmalade, pickles, sharbats, squashes, ketchup, sauce, Juices, dehydration of vegetables etc.

RESEARCH FACILITIES AND AREAS OF INTEREST :

The department is confronted with acute shortage of building, being at present housed in one corner of the building of Agricultural Experiment station, where there is want of space for setting up good laboratories. However, inspite of difficulties a good laboratory for chemical work has been set up on the farm. On the farm sufficient material is available for research work and as a whole satisfactory research facilities are available for conducting experiments with 19.5 acres of fruits and 6.0 acres of vegetables. The interest in the research is being focussed on studying the effect of manurial trials on the growth and yield of horticultural crops, effect of growth promotors and growth retardents on flower formation, pod development and germination studies in okra, effect of date and height of pruning in the maturity of phalsa, floral

biology of fruit crops, effect of atmospheric conditions on bud break and blossoming in peach and plum propagation of guava, aonla and pomegranate, seed production in exotic vegetables, performance of rose and bougainvillea varieties, preparation, preservation and acceptability of horticultural products

RESEARCH

Research projects were undertaken by post graduate students under the supervision of teachers and some independently by teachers Some of them have been completed, others are in progress

1 Effect of different levels of nitrogen, phosphorus and potassium on growth and yield of onion

2 Pod development and germination studies in okra var Pusa Sweani

3 Studies on nutritional status of fruits, vegetables and ornamental plants in Rajasthan—USAID Projects

4 Studies on Propagation of pomegranate and aonla

5 Effect of height and date of pruning on the growth and yield in phalsa

6 Effect of different doses of N,P,K application on the growth and yield of fig

7 Effect of different levels of N,P and K on the yield of cauliflower

PROJECTS IN PROGRESS

(a) Effect of growth regulators on fruit set, fruit development quality and other treatments on the storage life of phalsa

(b) Studies on morphological and physiological changes in the developing fruits of guava

(c) Propagation of guava using mist propagation and cuttage

(d) Nutritional studies in pomegranate

(e) Effect of plant growth regulators on the bulb size of onion.

(f) Effect of fungicides for the control of blight in five varieties of potatoes.

(g) Effect of plant growth regulators on the induction of partnenocarpy in guava, grapefruit and mandarin.

(h) Effect of plant growth regulators on the fruit set, fruit drop, fruit development and quality in mandarins and sweet orange.

(i) Effect of insecticides on the emergence of papaya leaf curi and mosaic virus.

(j) Studies on the induction of polyploidy in guava and papaya by colchicine treatment.

(k) Studies on morphological, physiological, ecological and post-harvest physiological aspects in pomegranate submitted for PL–480.

SPECIAL FEATURES :

(a) Scholarships:—

Shri Nathu Lal who passed his M.Sc. from this department and is at present engaged in active work in the Directorate of Extension was granted seminar fellowship of I.C.A.R. for research leading to Ph.D.

(b) Seminars and Conferences:—

Dr. K.S. Chauhan, Head of the Department of Horticulture attended seminar on fruits, held at the Punjab Agricultural University, Ludhiana and took part actively in problems of fruit cultivation in India. Dr. S.L. Soni, who was formerly working at the Jobner Campus of the University has been transferred to this place. He attended the 57th session of the Indian Science Congress at Kharagpur and presented a paper entitled "Effect of storage media and other post-storage treatments on the germination and seedling growth in mandarin" by S.L. Soni and K.S. Chauhan. Further, it is a matter of great happiness that one paper entitled "effect of different seasons on the morphological and physiolo-

gical changes in the developing fruits of lemon" by S L Soni has been accepted for presentation at the 18th International Horticultural Congress, Tel-Aviv, Israel It is an honour for the University and for the Department

(c) Library —

The department has a small library which contains important books in the field of horticulture science, term papers on current topics in horticulture, theses of students and bulletins etc for the help of teachers and post graduate students

(d) Flower show —

The department also organized a flower, fruit and vegetable show on the lawn of the college, which received enthusiastic response from the citizens of Udaipur for two days Large number of entries were received from nearby villages from farmers as well as from private gardens, institutional gardens, hotel gardens and public gardens like Gulab Bagh, Nehru Park, Japanese garden, Sahelion ki Bari etc The cultivators took keen interest in the show and many of them received prizes

LIST OF PUBLICATIONS

Chauhan, K S (1969) Effect of pruning on the performance of phalsa *Annals of Arid Zone* 8 1

——(1969) Cauliflower seed production at Udaipur *Allahabad Farmer, XLIII* (3) 219 21

Chauhan, K S and M S Manohar (1969) Role of plant regulators in Horticulture I History, Nomenclature and methods of application *Allahabad Farmer, XLIII* (2) 133-137

Chauhan, K.S , K C Pundrik and V K Verma (1969) Effect of different levels of nitrogen, phosphorus and potassium on vagetative growth and yield of okra *Punjab Hort* J (In Press)

Khurdiya, D S and S S Verma (1969) Acceptability of Kair (Capparis decidua Pax) pickles made in various styles I Effect of maturity of fruit and crushing of fruit on organoleptic quality of kair pickles *Indian Food packer, 23* (3) 1 3

———(1969). Acceptability of kair pickles made in various styles—II. Effect of level of spicing on the organoleptic quality of the kair pickle. *Indian Food Packer, 23* : (5)

Soni, S.L. (1969). Effect of plant growth regulators on the ripening and shelf life of tomatoes, Raj. Agri. 9 : 26-30.

Soni, S.L. and G.S. Randhawa (1969). Morphological and physiological changes in the developing fruits of lemon. Indian J. Agri. Sci. 39 : 813-29.

———(1969). Seasonal changes in concentration of minerals in twigs of different growth flushes. *Indian J. Hort. 20* (In press).

———(1969). Change in pigments and art coustitments of lemon peel during growth *Indian J. Hort. 26* : (In Press).

Soni, S.L. and K.S. Chauhan (1969). Effect of storage media and growth regulators on the seed germination and seedling growthin mandarin. Presented at the *57th Indian Science Congress*, pp. 27.

Soni, S.L. and G.S. Randhawa (1969). Effect of different seasons on the morphological and chemical changes in the developing fruits of lemon; accepted for presentation at the 18th International Horticultural Congress, 18-25 March, 1970.

Soni, S.L. and N.L. Jain (1969). Sterilization of pea puree by gamma radiations and its effects on the physilo-chemical and organoleptic qualities of puree as compared to sterilization by conventional heat processing *Indian Food Packer* (1969) In Press.

Soni, S.L. and K.S. Chauhan, (1969) Fruits for your home garden. Accepted for publication *Probadh Krashak* (Current Vol.)

Soni, S.L. (1969). Chillies for profit, Unnat Krishi (April, 1969).

DEPARTMENT OF LAW

The Department of Law is a constituent of the University School of Basic Sciences and Humanities. It is the oldest Department for the teaching of Law in Rajasthan, having been started in 1945, as a part of

Maharana Bhupal College, Udaipur Shri A Natraj was Head of the Department till February 5, 1967 Shri N L Bhattacharya took over from him

ENROLMENT ·

Classes (LL B 3 Years Degree Course)	Boys	Girls	Total
1 LL B Ist year (First Semester)	79	2	81
2 LL B 2nd year (First Semester)	50	1	51
3 LL B Ist year (Second Semester)	63	2	65
4 LL B 2nd year (Second Semester)	50	1	51

LIBRARY

Adequate Library facilities could not be provided However, a sum of Rs 20,000/- per year for Law Books was granted by the University Grants Commission, which met the minimum requirements With the available grant and other sources, about 1200 Books including texts and reference books could be procured The School subscribed to 33 Foreign and Indian Law Journals, out of its local funds

Students and teachers were handicapped for want of proper Library accomodation and staff

STUDENT TEACHER RELATIONS

The relation between students and their teachers was on the whole happy But there was dispute between First Year and Second Year classes over the question of presidentship of the Students' Union The Second Year students claimed that only students of at least one year standing should be allowed to contest for the post of President of the Union The Frist Year students, however, claimed that they should not be debarred from seeking election to that post Looking to the instances of the past, the claim of the First Year students was upheld They, being in numerical superiority, could successfully put one of their class fellows into that post Thereupon the Second Year students, as a body boycotted the Union and ultimately paralysed it Inspite of repeated persuasions by the Head of the Department and the Dean of Students Welfare, no amicable settlement could be arrived at and the Union had to be ultimately dissolved The above disputes resulted in strikes and demonstrations by the students Ultimately the matter [illegible] own students were persuaded to carry on their [illegible]

Bodies of representatives of the students appointed by the Head of the Department with common consent of the students. At the beginning of the session, the relation between the teachers and students was slightly strained due to claims and counter-claims of the 1st year LL.B. Class against the 2nd year class. But later on better understanding developed and the relation became cordial and happy.

EXTRA-CURRICULAR ACTIVITIES—STUDENTS' WELFARE :

The School participated it the VIIth University Tournaments.

The following Scholarships and other concessions were given to the students this year :

1. Govt. of Rajasthan Scholarship to S.C. and S.T. Students.	4 students Rs. 2,228/-
2. Merit Scholarship by the University of Udaipur, Udaipur.	1 student Rs. 600/-
3. Full-Freeship awarded.	9 students Rs. 1,800/
4. Half-Freeship awarded.	9 students Rs. 900/-

In addition to these the State Government and University servants who drew pay less than Rs. 400/-(they themselves and their wards) were exempted from the payment of Tuition Fee which amounted to Rs. 13,000/-.

DEPARTMENT OF MATHEMATICS

1 ENROLMENT :

Post-graduate :	M.Sc. (Prev.)	11
	M.A. (Prev.)	1
	M.Sc. (Final)	10
	M.A. (Final)	1

2 RESEARCH PUBLICATIONS :

Teachers :

Dr. U.C. Jain :

(a) On Chains of Generalized Laplaces transform involving the H-function (Riv. Mat. Uni. Parwa (2) 8 (1967) 125-130.

(b) On Chains for Meijers Bessel function transform involving H-function
(Vijanana Parishad Anusandhan Patrika, (1967)

Dr R. Shim

(a) Boundary Layer in some unseparated axisymmetrical flows
(Agra University Journal Vol XV Part II, 1966)

(b) Flow of a Non Newtonion fluid through rectilinear piper
(Agra University Journal Vol XV Part II, 1969)

Shri K S Bhatnagar

(a) Heat transfer due to a sphere steadily rotating in an infinitely extending non-Newtonian fluid Proc Nat Insh Sci 35, No. 2, 298, 1969

(b) Heat transfer in Channel flow of micropolar fluids, published in Proc Ind Acad, Sec 70 Sec A, 4, 165, 1969

(c) Secondary flow induced by the rotation of a sphere or co-axial cones in micropolar fluids, Phelogica Acta 7, 209, 1968.

(d) Secondary flow induced by the rotation of two concentric spheres about their common diameter in micropolar fluids, Rheologica Acta Band 8, 44, 1969

(e) Secondary flow of a elastico-viscous fluid between two co-axil cones oscillating about a tixed axis Jour Ind In st Sec Vol 52 No 134, 1969

DEPARTMENT OГ PHILOSOPHY

ENROLMENT

Post-graduates	M A Previous	10
	M A Final	9
	Total	19

Research 3 (Three)

2 Areas of interest in Research — Indian Philosophy Religion Ethics and theory of knowledge

3. Research Publications : "Ethical Philosophies of India" Book by Dr. I.C. Sharma.

Teachers : "Ethical Doctrines in Jainism" Book by Dr. K.C. Sogani.
"पश्चिमी आचार विज्ञान का आलोचनात्मक अध्ययन"
Book by Dr. I.C. Sharma.

DEPARTMENT OF PLANT PATHOLOGY

ENROLMENT :

(a) Post-graduates :
M.Sc. (Ag.) Pl. Pathology (Prev.)–5
M.Sc. (Ag.) Pl. Pathology (Final)–5
M.Sc. (Ag.) Pl. Protection –7

(b) Research : In all ten students are registered and working for Ph.D. at both the campuses including the research stations.

RESEARCH FACILITIES AND AREAS OF INTEREST :

At the Jobner Campus, the department is not properly housed and is scattered in the two buildings of Biology and the Administrative Blocks. There are no adequate facilities for conducting practic also for undergraduate classes. The department also requires space for pot culture and glass houses for conducting various experiments. To have effective teaching at post-graduate level in all the disciplines of Plant Pathology, thela boratory facilities by way of equipment and apparatus need to be further augmented.

At the Udaipur campus, including the Research Station, laboratory facilities by way of equipment and apparatus need to be increased for effective teaching of post-graduate classes and conducting research. The department caters to the need of teaching and research in crop diseases caused by fungi, Bacteria, Viruses, Nematodes, Phoenerogamic parasites and Deficiency diseases. The department also collaborates with the department of Agricultural Extension Education in advising the farmers on plant pathological problems.

RESEARCH PROJECTS

Mycology and plant Pathology

**1 Studies on Alternaria blight of vegetables
*2 *Phyllosticta* leaf spot of spinach
*3 Bie-back of mango
*4 Studies on wilt of cumin
**5 Studies on Alternaria blight of watermelon
**6 Studies on *Piricularia* leaf spot of *Bajra*
**7 Investigations on the powdery mildews of cucurbits in Rajasthan
**8 Resistance to smut disease of *Bajra*
**9 Studies on Blight of Yam
10 Studies on *Physpoderma* disease of maize
11 Studies on leaf spot and fruit rot of guava
12 Studies on *Phytophthora* fruit rot of Guava
13 Downy mildew of opium poppy
14 Powdery mildew of opium poppy
15 Studies on seed microflora
16 Survey of crop diseases
17 Mycoflora of pea nut with special reference to *Aspergillus niger* causing collar rot
18 Bioassay of fungicides
19 Physiology of appresoria formation in *collecto triachum*
20 Studies on *Ramularia* blight of fennel
21 Investigations on diseases of *bajra* and their control
22 Science of mango
23 Antifungal activities of plant exhists

*Projects of M Sc students for their theses
**Projects of Ph D students

Bacteriology

1 Studies on bacterial blight of paddy
2 Investigations on the pathogenic capabilities and control of bacterial stalk rot of maize

3. Comparative study of *Xanthomonas* species pathogenic to some economic crop plants with reference to pectinolytic enzyme production.
4. Survey of bacterial diseases of economic crop plants of Rajasthan.
5. Factors affecting survival of phytopathogenic bacteria.
6. Studies on citrus canker.
7. Establishment of colture collection of phytopathogenic bacteria.

Nematology :

1. Survey of plant parasitic and free living nematodes inhabiting Udaipur soil.
2. Survey of plant parasitic nematodies commonly associated with important crops of Rajasthan.
3. To evolve suitable control measures of 'Molya disease' of wheat and barley in Rajasthan.
4. Geographical distribution of Meloidogyne species in Rajasthan.
5. Variations in *Heterodera avenae* collected from different loca lities of Rajasthan.
6. Evaluation of different vegetables and their varieties for resis- tance to plant parasitic nematodes.

Virology :

1. Ubia disease of muskemelon.
2. Investigations on virus diseases of vegetables plants.

RESEARCH PUBLICATIONS :

Teachers :

1. Seed mycolfora of watermelon *(Citrullus lanatus* thumb) Bulletin of Grain Technology Vol. No. 4, Dec. 1968 pp. 207-215. G.L. Khandelwal and R. Prasada.
2. Seed mycoflora of muskmelon *(Cucumis melo L)* Bulletin of Grain Technology, Vol. VII No. 1 March 1969, pp. 26-30. G.L. Khandelwal and R. Prasada.

3 Morphology and Taxonomy of Alternaria leaf spot of watermelon (Accepted for publication—Indian Phytopathology XXIII) G L Khandelwal and R Prasada

4 Antagonism of different seed mycoflora isolated from cucurbitaceous seeds LABDEV-Journal of science and Technology, Vol 7 B No 3 July 1969, p 236 G L Khandelwal and R Prasada

5 Morphology, physiology and control of *Alternaria* brassicae isolated from taramira (Accepted for publication-Indian Phytopath XXIII) R Prasada, G L Khandelwal and J P Jain

6 A new species of Ascochytad on cannalis sativa L Sydowia 21 277 278, 1968 D D Shukla and V N Pathak

7 A new species of *Phomopsis* from India Mycopathologia at Mycologia Applicata (Accepted 1968) D D Shukla and V N Pathak

8 Influence of certain salts and radiation on growth and formations of pycnidia in cultures of *Physalospora rhodiana* (Berk & Curt) ckc Syn (Diplodia natalensis) Pole Evens, the incitant of stem-end rot of mango fruits Nova Nedwigia Accepted 1968. V N Pathak

9 Production of Cellulolytic enzymes by *Diplodia natalensis*, Lloydia 32 220 1959, V N Pathak and N Prasad

10 Antifungal activity in leaf extracts of certain plants, LABDEV, Accepted 1969 V N Pathak and J P Jain

11 Epidemiology and prevention of *ilodia* stem end rot of mango fruits Phytopath Z 65, 145 156, 1968 V N Pathak and D.N Srivastava

12 Pectinolytic enzymes of *Diplodia natalensis* pole evans Phytopath Z 65, 263 266 V N 1968 Pathak and D N Srivastava

13 Controlling stem end rot of ripe mango fruits Indian Farming, August, 1968, V N Pathak and D N Srivastava

14. A cheap solid medium for routine culture of fungi. Labdev, 7:170-171, 1969, V.N. Pathak.

15. Malformation disease of Mango. University of Udaipur Research Studies (Vol. 4) V.N. Pathak, D.D. Shukla and M. Rao.

16. Efficacy of fungicides for the control of Collar rot of groundnut, accepted in Indian Phytopath. J.P. Agnihotri and M.P. Sharma.

17. Two new hosts for powdering mildews in India. Indian Phytopath 22:251, 1969. J.P. Jain and R.D. Singh.

18. Sphaerotheca fuligenia (schlecht) Pollaci on Sunflower (Helianthus annua L) a new record for Rajasthan. Indian Phytopath 1968, XXI, 4, 449-450. R. Prasada, J.P. Jain and M.K. Bhatnagar.

19. Response of wheat varieties to stem rust, LABDEV 6, 251-252, 1968. V.N. Pathak and G.S. Sharma.

(b) Students :

1. Fungal collections from Rajasthan State of India, Sydowia 22, 1968. V.N. Pathak, S.R. Ahmed, P.C. Lodha and B.S. Saruparia.

ANY OTHER NOTABLE FEATURES :

(a) Outstanding achievement or new findings in research :

1. *Diplodia natalehsis*, the fungus, which incites rot of mango fruits was found to produce the cellulolytic enzymes. The phosphorus content of the fruits around the infected zone increased. The pathogen was found to be inhibited *in vitro* by Antracol.

2. Collar rot of groundnut caused by *Aspergillus niger* was found to be effectively controlled by S.D. 6335 and S.D. 6334. The fungicides inhibited the growth of the pathogen *in vivo* as well *in vitro*.

3. G/D concept was used for the first time to determine the grain production efficiency of maize leaves infected by *Physoderma maydis*.

. Cercospora leaf spot of Cow pea was found to be effectively controlled by Dithane Z. 78 or Bordeaux mixture.

5. Alternaria blight of watermelon could effectively be controlled by Dithane Z. 78.

Following are new records of fungi or hosts :

(a) *Microdiplodia* on Litchi.

(b) *Sphaerotheca* fuligena on sun flower.

(c) *Erysiphe Chicoracearum* on sweet Sultan.

(d) *Oidiopsis* sp. on 9 hosts recorded for the first time.

(e) *Alternaria brassicae* on Taramira.

(f) *Alternaria cucumerina* on watermelon.

(g) *Alternaria tenuis* on Chorchorus sp.

(h) *Cladosporium herbarum* on *Ipomea cornea*.

(i) Colletogloeum sp. on Dalbergia sisco.

(j) *Piricularia Penisetti* on Bajra a new species.

7. 29 research papers were either published or sent for publication.

B. ACHIEVEMENT IN EXTENSION WORK AND ITS IMPACT ON FARMERS :

Damping off of cabbage, chillies and tomato was effectively contro-lled by solid renching by Erassicol. Various phytopathological problems were referred to the Department and for them not only suitable contro measures were recommended but the fungicides were also given fror time to time. Spray schedules for some of the important diseases this area were worked out and recommended.

C. PERFORMANCE OF STUDENTS ELSEWHERE :

One student has been admitted to M.Sc. (Plant Pathology I.A.R.I. Only one student applied for admission to M.Sc. Plant Pa logy at U.P.A. and he was admitted.

RESEARCH FACILITIES AND AREAS OF INTEREST :

Research facilities were made available in the fields of Minor Irrigation and Soil and Water Conservation for the students working towards their M.Sc. (Ag.) Soil and Water Conservation.

RESEARCH PROJECTS/U.G.C. SCHEME/AND OTHER SCHOLAR'S FIELD OF WORK :

(a) The scheme on Minor Irrigation namely Studies on the hydraulics of border Irrigation to evolve the design criteria for border irrigation in the sandy and sandy loam soils of Rajasthan sanctioned by the Ministry of Food and Agriculture, Government of India in the year 1964 was concluded and the final technical report was prepared and submitted to the Ministry for circulation during the year. Research under this Scheme was conducted at Jobner Campus.

(b) The work was also initiated on the design criteria for the bunds in sandy loam soils and was in progress during the year and the work may be completed during the current year.

RESEARCH PUBLICATIONS :

(a) Effect of Irrigation methods on wheat (Sonora 64) at different Nitrogen levels, by J.F. Correia and S.S. Rathore in "The Harvester" Vol. II, No. 1. January, 1969.

(b) Shri J.F. Correia presented a paper on "a demonstration and testing structure of hydraulic phenomena in irrigation" in the VII meeting of Indian Society of Agricultural Engineers held in February, 1969 at Pantnagar.

ANY OTHER NOTABLE FEATURE :

(a) At the end of the year, funds amounting to Rs. One lac approx. were made available by the Group Leader, OUS/USAID, University of Udaipur, Udaipur for the establishment of Soil and Water Conservation Demonstration centre at the campus of College of Agriculture, Jobner. Most of the work was assigned to this department and the work was started in April, 1969. It is hoped that it would be completed during the current year.

(b) Shri J F Correia attended a $3\frac{1}{2}$ months international course in Drainage offered by the International Institute for Land Reclamation and Improvement Wageningen, The Netherlands, from September through December, 1968 He was the only participant from India in that year

DEPARTMENT OF FARM MACHINERY & POWER

There are research facilities for carrying research work on

1 Plant Protection Equipment

2 Testing of Small Tractors

RESEARCH PROJECTS & SCHOLARS FIELD WORK

(a) Development of Potato Planter

(b) Electrification studies of RCA Campus

(c) Fabrication of test set up and studies on tillage tools

(d) Tests conducted on threshing machines to evaluate their performance

(e) Tests conducted for comparative studies of different methods of threshing

DEPARTMENT OF ELEC. & MECHANICAL ENGINEERING

Shri M L Khandelwal lecturer in Mech Engg and Shri Kedar Nath Mathur, Tech Asstt in Processing Engineering, Lab attended a "Short term course of 8 weeks' duration in coldstorage" for Produce held in Central Food Technological Perishable Research Institute, Mysore–2, from 18th Nov ' 69 to 11th Jan 1970

DEPARTMENT OF INSTRUMENTATION CELL

The Instrumentation Cell was started in November, 1968 A foreman, Instrument Mechanic and an Electrician were appointed The object of the Cell is to provide facilities of minor repairs of all types of Instruments of various laboratories Testing equipments of Rs 19,284 20 were purchased and work started

WORKSHOP :

The function of Workshop may be divided as under:—

1. Maintenance.
2. Repair.
3. Manufacture.
4. Procurement.

The following staff is working under the Workshop Manager:—

1. Tech. Assistant.	2	(One as a graduate Assitt.)
2. U.D.C.	1	
3. L.D.C.	1	
4. Fieldman.	1	

The Technical Staff in various sections:—

1. Carpenter.	1
2. Blacksmith.	1
3. Jr. Mechanic.	1
4. Turner.	1
5. Farm worker.	2
6. Welder.	1
7. Drivers.	3
8. Electrician.	1
9. Cleaner.	1
10. Lab. Boy.	1

The casual labourer varies from 15 to 30 depending upon the workload. All the vehicles, Tractors and other Machines were repaired and maintained by the workshop as usual. Other equipments like refrigerators, incubators and other Electrical appliances in laboratories were regularly attended to by workshop staff.

The plumbing work for whole of the college and the hostels which need frequent attention was also taken care of.

The Telephone exchange and lines were properly maintained.

REPAIR :

The repair of furniture in all the Departments and other implements on the Agronomy, Horticulture and Dairy farm were repaired by Workshop regularly.

The rewinding of electric motors, the overhauling and repairs of Diesel engine pumps and instalation of pumping sets in the wells were also done

MANUFACTURE

All the new furniture for the College R C A Library was manufactured by Workshop in limited time inspite of many problems in procurement and labour A lot of other items like Professor's tables, Lecturer's tables, stools, showcases, chairs, Lab Tables, Boards, etc were manufactured for various departments In Blacksmithy also various new items like cages, iron plates and other small tools needed for cultivation were fabricated in the Workshop

Procurement of various material spares, fuels and lubricants, tyres and tubes electric motors, and other equipments needed for Workshop and various departments We faced great difficulties in getting material and other items in time Hence the work suffered a lot In our store eleven stock registers are maintained containing various items

The budget amount and the headwise expenditure during the financiel year 1968 69

1	Maintamance of Vehicles and Tractors	16000/-	16000/-
2	Repair of Workshop Tools and implements	6000/-	6000/-
3	Repair furniture	3500/-	3500/-

The College has developed tremendiously and in order to maintain the physical plant as best as possible the workshop should also be expanded

The following suggestions are given to provide maximum efficiency .

1 Expansion in space

2 Purchase of some machines (like Lathe, shapper etc)

3 Peon—1

4 Pipe fitter cum Jr Machanic—1

DEPARTMENT OF SANSKRIT

1. Enrolment

(a)	Post-graduate	15
(b)	Research	5

2. Research facilities are very meagre. The Library is not well-equipped for research work. Sanskrit literature 'Jainism, Saivism' and other systems of philosophy and poetics are major areas of research interest.

3. Department held on an All India Seminar on "Principles of Library Criticism in Sanskrit" from December 26 to 28, 1968. The Seminar was a grand success. The Department has submitted a proposal to hold seminar on "Contribution of Rajasthan to Sanskrit Literature."

4. Research Publications :

   Principles of Library Criticism in Sanskrit, edited by Dr. R.C. Dwivedi, Delhi, 1969.

DEPARTMENT OF SOCIOLOGY

The department offers an eight-paper M.A. course in Sociology and there is a provision for supervision of research for Ph.D. Degree. From this session "Industrial Sociology and Labour Welfare" has been provided as one optional paper to the M.A. (Final) students.

ENROLMENT

There are 10 Students in M.A. (Previous) and 12 in the M.A. Final class this year. One research scholar is already enroled and three are busy writing their proposals.

RESEARCH FACILITIES AND AREAS OF INTEREST :

This department offers research facilities in various specific dimensions of Sociology. Following are the areas of specialization:—

1. Research Methodology
2. Political Sociology
3. Rural Sociology

4 Mass Communication
5 Sociology of Education
6 Modern Organizations
7 Industrial Sociology
8 Medical Sociology
9 Sociology of Religion
10 Tribal Studies

RESEARCH PROJECT/UGC SCHEMES/AND OTHER SCHOLAR'S FIELD WORK

1 Project on "Bibliography on Political Sociology in India Abroad" sponsored by the University Grants Commission

2 The teachers of the department have voluntarily taken up a Project to prepare a monograph on "Social Structure in Rajasthan" The work is in progress

3 Following are the scholar's field of works and areas of interest

Dr O P Sharma	Emerging Patterns of Rural Leadership in India
Dr S L Doshi	Changing Pattern of Bhil Life in Banswara
Dr B K Lavania	The Impect of Community Development Programmes on the Social Structure of the Bhils in Southern Rajasthan
Dr G R Gupta	Marriage rituals and Social structure in a Rajasthan Village
Shri Rajendra Singh	Elites and Social Change

RESEARCH PUBLICATIONS

Dr O P Sharma	'Gramin Parivartan mein Pratirodhak Sanskritik aur Manaviya Karak ' *Bharatiya Samaj Shastriya Sameeksha,* Journal of Benaras Hindu University Vol I No 1 - Oct , 1968

Electrical and Hand Operated Calculators are being provided for calculation work alongwith needful training of operating them efficiently.

This facility has been extensively used by the students and the staff.

DEPARTMENT OF URDU

AREA OF INTERSEST IN PESEARCH (URDU POETRY) :

Shri S.H. Rizvi, the only teacher of this department is engaged in the Research work and his thesis will be completed shortly. The project of Research is 'A critical edition of Diwan of Ahsanullah Bayan, with collated text, exhaustive introduction and a complete glossory'.

DEPARTMENT OF ZOOLOGY

ENROLMENT :

(a) M.Sc. Previous	Twelve.
(b) M.Sc. Final	Ten.
(c) Research scholars	Four.

RESEARCH FACILITIES AND AREA OF IENTERST :

Facilities for histochemical work are existing. More funds are required for research.

RESEARCH PROJECT :

2, C.S.I.R. fellows: 1, I.C.M.R. fellow and one U.G.C. Scheme.

RESEARCH PUBLICATIONS :

Teachers—	Total number—Thirty five.
Research Scholars—	(List attached)

FOREIGN VISITORS :

Prof. R. Wegmann, Director Institute of Histochemistry Medical, Faculty of Medicine Paris, France conducted a course on Modern Histo-enzymology, held in the first week of January, 1969.

CONFERENCES AND SEMINARS

Prof H B Tewarı presided over a session of the 2nd International Conference of Neurochemistry held at Milan in the month of September, 1-5, 1969, and alsorepresen ed India

LIST OF RESEARCH PUBLICATIONS

1 Dev, B Pattern of urinary out flow, quantitative relationship between ammonia and urea, secreted by leeches, with comments on their nephridial microflora, *Symp Rec Trends Anim Physiol*, Gorakhpur, U P India, pp 12-13 (Feb 13 15, 1969)

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7 Malik, C P Sood, P P and Tewarı, H B (1969) Occurence of lysosomes like bodies in plant cells Acid phosphates reaction Z Biol 116, 264 268

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25 Tewari, H B and Rajbanshi, V K (1969) Studies on the alkaline phosphatase and adenosine triphosphatase positive nucleoli in the club cells of Saccobranchus fossilis Ibid

26 Tewari, H B and Sood, P.P (1969) A comparative study on the distribution of alkaline and acid phosphatase amongst the constituents of various layers of olfactory lobe of rat Acta Anatomica 72, 276-303

27 Tewari, H B and Sood, P P (1969) A comparative study on the distribution of certain phosphatases in the nuclei of the neurons of some vertebrates Acta Histochemica et Cytochemica 2, 39-53

28 Tewari, H B , Sood, P P and Malik, G P (1969) On the distribution of acid phosphatase in the chromosomal loci of Drosophila annanase Acta Histochemica, 34, 189-192

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PART IV

REPORT FROM DIRECTORATE AGRICULTURAL EXPERIMENT STATION, UDAIPUR

INTRODUCTION

Efforts were continued to a approach the State Government for transfer of research to the University The State Research Coordination Committee which was set up last year took the decision that all new research schemes shall henceforth be taken up by the University and the entire research will be transferred to the University by the end of the fourth plan The following additional research programme was initiated in the University supported by outside agencies noted against each—

Research Projects	Date of commencement and duration	Financing agency
1 Factors affecting efficiency and effectiveness of mutagenic agents with a view to produce desirable mutations	2 11 68 3 years	Atomic Energy Comm
2 All India Coordinated Maize Improvement Scheme—		
(a) Maize Breeding Scheme	28-11-68 IV Plan	I C A.R
(b) Research on Diseases of Maize	28-5 69 3 years	I C A R
(c) Investigation on the Major Insect Pests of Maize with special reference on the insect plant relationship	29 5 69 3 years	I C A R
(d) Agronomic investigation with maize germ plasm	26-6-69 3 years	I C A R.
3 Marketing of Wheat in Rajasthan	1-12 68 3 years	I C A R
4 Coordinated Scheme for studies on Soil Salinity Irrigation, Drainage, Soil Science and Water management	3-1-70 3 years	I C A R
5 Studies on Salt Tolerance of field crops	29-4 69 5 years	I C A R

The progress which has been made during the year on various facets of the Agricultural Experiment Station is reported here.

RESEARCH STATIONS :

Efforts were intensified to create more facilities at Vallabhnagar for field research. Another 75 acres of land was roughly levelled bringing the total to 175 acres under rough levelling. An area of 27 acres has been further precision levelled with provision of assured irrigation and drainage facilities bringing the total average to 52 acres under finished development. Three wells were further deepened and fitted with pumping sets. 975 feet of pucca irrigation channel was added during the year under report. About 350 feet of main drainage channel was completed on one side of the main road. The farm was further electrified. Besides electrification of the three wells, one field laboratory was also completed and electrified. For acquisition of about 96 Bighas of land, lying as pockets in the first block of our development, notification was issued by *the State Government under sections 4 and 5.* At Asalpur research farm, 25 acres of land has been levelled with the limited resources and an access road has been provided to the farm from the main public road.

REPORT ON RESEARCH PROJECTS :

Summaries of the research work done along with the publications made during the year are given below under different University Departments participating in the Agricultural Experiment Station programme.

Studies on saline sodic soils and crop growth :

Effect of saline irrigation water on the Physico-Chemical properties of soils. A survey of quality of irrigation waters of Nagaur District was conducted. The water was found to be highly saline, with prodominance of sodium followed by magnesium and calcium. Water rich in soluble carbonate was of low salinity and showed negative correlation with the total salt concentrations; carbonate and bicarbonate content correlated with the PH of the soils.

None of the existing classifications was found fully applicable under Nagaur conditions. The correlations between the chemical characteristics

of soil and water were found to be of limited applicability for predicting quantitatively the saline sodic conditions of a soil

Analysis of 118 well waters of Bhilwara district was carried out for their quality in relations to the growth of wheat crop Excellent growth of wheat was observed even on irrigation with water having high salinity, SAR and bicarbonate content Significant correlations were observed between electrical conductivity and total cations (r=0 99), electrical conductivity and boron (r=0 63), sodium absorption ratio and boron (r=0 39), pH and bicarbonate (r=0 29) and residual sodium carbonate X pH (r=0 32)

The flourine content of well water varied from 2 to 24 ppm and such water may create health hazards Flourine content significantly correlated with electrical conductivity, sodium absorption ratio and boron content of these well waters

Availability of nutrients in salt affected soils Green house studies on the effect of increasing levels of nitrogenous and phosphatic fertilizers separately were conducted on the alkali soils of Vallabhnagar and saline alkali soils of Bhilwara A dose of 120 lbs /ac of N and 80 lbs /ac of P increased the grain yield of wheat significantly Interaction each of FYM with gypsum and N was found significant while interaction of gypsum with N was not significant

The chemical properties of soil studied after the harvest of maize showed that treatments of gypsum, FYM and N alone has significantly reduced exchangeable Na on both the soils Nitrogenous fertilizer and FYM separately increased the availability of P

Effect of salinity on crop growth In pot experiments it was found that mustard is more salt tolerant than linseed and yield of both decreased significantly at electrical conductivity of 17 5 and 6 1 m mhos/cm respectively Oil percentage decreased whereas iodine value increased with salinity

Soil salinity, irrigation drainage soil science and water management

The work of the Scheme has been started Analysis of water samples of 15 wells (11 of the college farm at Jobner and 4 of the Asalpur farm

is being done. Soil samples from 8 different sites of the College farm for 4 different depths were collected and are being analysed for pH, conductivity, anion and cation concentrations of the soluble salts in the saturation extracts.

Studies on Soil Fertility :

Phosphorus contents in Rajasthan Soils. Studies on total and different forms of soil phosphorus in Rajasthan soils showed that the soils of Jodhpur (desert), Sawaimadhopur (alluvial) and Sirohi (hill) regions are poor in total P content while those of Kota, Bundi, Jhalawar (medium black) Tonk, Chittor (yellowish brown) and Ajmer (gray brown soil) regions are moderate to high, Ca-P is the predominant from followed by Fe-P in all the soil, except in Alwar (alluvial) and Jhalawar (medium black) soil where Al-P is more than Fe-P.

Studies on physical properties of soil :

A laboratory study was conducted on two light soils, one clayey soil and one highly sodic soil to evaluate the efficiency of 2 by-products of paper industry (Celec and paper sludge) in ameliorating the soil structure. Application of these amendments improved physical properties of the soil viz., degree of aggregation, water holding capacity, pore space. The beneficial effect was more in case of light soil-.

On the basis of particle size distribution (salt and clay) and organic matter content, a new equation has been proposed to predict cation exchange capacity of Rajasthan soils which fits in better than the other existing empirical equations.

Studies on trace elements in Rajasthan soils :

(a) Distribution of different forms of manganese and available copper in 400 soil samples representing different soil groups of the State from 15 districts has been studied. Desert soils of Jodhpur and Nagaur, grey brown soils of Pali and alluvial soils of Jaipur and Ajmer districts are highly deficient in Mn. This was further verified by plant uptake studies with 8 commonly grown crops of the state. Available copper is deficient in sandy soils of Nagaur and Jodhpur districts.

Out of several methods it was found that 3 N ammonium ortho-phosphate extraction procedure is the best for determining available Mn status of Rajasthan soils

Studies on effect of macro elements on the uptake of micro elements by wheat, maize and corghum are in progress

Bio-Chemitry :

Study of the quality of genetic materials of economic crop plants A simple method for quick estimation of major protein fractions viz , albumin, globulin, gliadin and glutenin of wheat flour was developed Eleven wheat varieties were analysed for these fractions as well as for total protein content The protein content varied from 8 to 18 per cent The HD series of wheat i e , HD 38-1621 HD 267 100 HD 579-63 1399 and HD 582-5-36 were low in protein content (10%) whereas those of the PKD series i e , 4, PKD-2, PKD-6, PKD-7 and PKD-14 had higher protein content The ratio of prolamine to glutenin was 1 to 2 for HD series and 0 7 to 0 9 for the PKD series The baking quality of wheat is determined by these ratios

Study of biochemical changes in plants infected by plant pathogens Out of 19 chemical tested the phytoalexin, pisatin could be induced in pea leaves by the following 6 chemicals viz , taurine, lencine, L-hydroxyproline and L ornithine hydrochloride Further work is in progress

Microbiology

Studies on nitrogen fixing micro organism Isolation of bacteria from nodules of several legaminous crops has been made Identification is being done

PUBLICATIONS

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34th Annual Session of Ind. Soc. Soil Science 23-25th May, 1969, Udaipur.

3. Mehta, K.K. and Paliwal, K.V. 1969. Quality of irrigation water of Bhilwara district in relation to growth of wheat. Presented at 34th Annual Session of Indian Soc. Soil Sci., May 23-25th, 1969, Udaipur.

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5. Paliwal, K.V. and Lavti, D.L. 1968. Soil structure problems in the South Eastern Region of Rajasthan. Presented at the 1st Annual Workshop on Soil Structure held at Agril. College and Research Institute, Coimbatore, December 6-8th, 1968.

PLANT PATHOLOGY

Survey of bacterial diseases of economic crop plants :

Black rot of cabbage was observed in the last winter in several vegetable growing areas of Udaipur. The organism has been identified as *Xanthomonas campestris*. Bacterial diseases of several other crops viz., Sesamum, pea, cauliflower, have been observed. Isolation and identification work are in progress.

Studies on citrus canker :

Spray trials were conducted to find out the efficacy of different antibiotics in combination with some fungicides and some earlier recommended chemicals for controlling the disease under field condition.

There were 11 treatments and 3 replication for each treatment. The treatments included 2 concentrations viz., 500 and 1000 ppm of Streptomycin+Ziram; Streptomycin+Terramycin; Streptocycline+Bisdithane and ultrasulphur @ 1½ lbs in 25 gallons; Sodium arsenate+copper sulphate 100 ppm and control. Three sprays were given at intervals of 25 days starting from 11th Nov., 1968. There was no further spread of the disease between Nov., 1968 to February 1969 and there was defoli-

cation of leaves during February-March 1969 and young flush started appearing Therefore premonsoon sprayings were taken up with the some treatments starting from June, 1969

Investigation on bacterial stalk rot of maize

Work on the nutritional requirements of M_1 and M_2 strains of *Erwinia carotovora* and *Pseudomoneas lepsa* is in progress

Studies on pectinolytic enzyme production by Xanthomonas spp

Xanthomonas cyamopsidis, the guar blight and leaf spot bacterium produced polygalacturonate trans eliminase enzyme in vitro and maximum activity was at 25 C and 30 C The macerating enzyme activity was also high at 25, 30 and 35 C

Factors affecting survival of phytopathogenic bacteria

Survival studies of the 2 maize stalk rot bacteria Erwinia Carotovora (M_2) and *Pseudomonas lapsa* with respect to seed, stalk, rhizosphore are in progress More than 50 actinomycetes were isolated from the soil and studied for their antagonistic nature with respect to these 2 organism

Studies on the bacterial blight of rice

Nutritional studies of 16 isolates of *Xanthomonas orxzae* are in progress To study the occurence of the disease, 180 paddy varieties have been sown at Vallabhnagar.

Collection, preservation and maintenance of phytopathogenic bacteria

A Collection of authentic plant pathogenic bacterial cultures has been established At present there are 63 bacterial isolates comprising 19 species belonging to 5 different genera e g , *Xanthomonas, Paeudomonas Erwinia Agrobacterium* and *Corynabacterium*

An experiment to find out a suitable method for preserving bacterial cultures is in progress

Survey, collection and identification of plant parasitic nematodes :

The followine plant parasitic nematodes were found to occur commonly in Udaipur soils :

Hopololaimus indicus Sper 1963.

Pratylanchus delattrai Luc. 1958.

Tylenchorhynchus mashoodi Siddiqi 1959.

Pratylenchu zae Graham 1951.

Heterodera avense Wollenweber, 1924.

Study of the plant parasitic and free living nematodes inhabiting Udaipur soil :

The following free living nematodes were found in Udaipur soils :

Discolaimus tenex Siddiqi 1964.

Trischistoma sp.

Eudorylaimus investrtentus Enorne and Swanger, 1936.

Acrobelis complexus thorne, 1925.

Pailenchus hilarus de Man 1921.

The following plant parasitic nematodes were also recorded :

Rotylenchulus reniformia Linford and Olivetra 1940.

Xiphinema lessiri Siddiqi 1959.

X. indicum Siddiqi 1959.

Trichodorus sp.

Anguina sp.

Ditylenchus sp.

Pratylenchus brachvorus.

Tylenchulus semipenetrans.

Studies on Molya disease of wheat and barley :

Observations in the field and pot experiments in the green house reveal that growing of carrot and mustard reduce the population of the

nematode Hetarodera avenae Cysts of the nematodes from diseased maize plants were collected from different localities of Rajasthan, in 1968 Cross inoculations showed that Heterodera isolate from maize can attack wheat also

Evaluation of different vegetables and their varieties for resistance to plant parasitic nematodes with special reference to Meloidogyne, species

Forty five new and known hosts of root knot nematodes (M incognita and M javanica) have been found in Rajasthan At some places 40 60% damage in vegetable crops has been observed

Evaluation of fungicides in relation to important crop diseases

Downy mildew of opium poppy None of the 10 fungicides viz, Bisdithane, Dithane Z-78, Dithane M 22, Dithane S 31, Dithane H 45, Vitavax, Plantavax, Ferbam, Cupramar and Zincop, could control the disease completely However bisdithane showed 55% control of the disease

Seed Microfloa of bajra Effect of fungicides on viability and fungal invasion of bajra seeds stored at different relative humidities was studied None of the 7 fungicides e g, Agrosan C N Bisdithane, Brassicol, Hexathir, Tillex dry, Beej powder and Sandoz 6335 was effective with respect to retention of viability and fungal invasion

Collar rot of groundnut *(Aspergillus niger)* A field trial was laid out to test the efficacy of 7 seed dressing fungicides on the control of the disease caused by Aspergillus niger The fungicides S D 6334 and S + 6335 were effective in controlling the disease but were phytotoxic if concentration more than 1%

Stripe disease of barley (Helminthosporium gramineum) Among 11 fungicides and antibiotics viz, S D 6334, S D 6335, Agrosan G M, Ceresan, Tillex, Hexasan Brassicol Agallol, Fertix 85, Aureofungin, only Agrosan G H, gave good result

Coleoptera (119), Orthoptera (27), Diptera (13), Hymenoptera (10), Hemiptera (6), Homoptera (14), Others (32).

PREPARATION OF KEY FOR IDENTIFICATION :

Work is in progress.

MORPHOLOGICAL AND TAXONOMIC STUDIES :

(a) *Noctuidae :* The nervous system and development of *Prodenia liturc* have been studied in detail. Certain characters of taxonomic importance have been observed which can be used in identification and removing the existing controversies.

(b) *Scarabaeidae :* Taxonomic notes on Rutelid-beetle *(Anomala plita* B.) and *Pentodon bispinifroms* have been prepared. Field population of white grup was estimated at Vidya Bhavan Rural Institute Farm at regular intervals. Results are being analysed.

STUDIES ON THE BIONOMICS OF MAJOR CROP PESTS :

(a) The bionomics of Stethorus gilvifrons Mulsant has been studied. It has been found that a single female lays 257 eggs during its life. The adults feed on Anytis sp. and both adults and grubs on Macrosiphum sp. as their second choice to caster mite Tetranychus telarius L. Its importances in mite control has been worked out.

(b) Biology of 3 species of coccinellid beetles was also studied. The predatory efficiency of Menochilus sexmaculata F. has been worked out. average no. of aphids consumed during larval and adult life is 225 and 350, respectively. It was found that Coccinella septempunctats completed 3 generations under laboratory conditions and one life cycle is completed in 18 to 21 days.

(c) Studies on the biology of Scutellera nobellis reveal that adult female lays 28-30 eggs in bionomical rows, the eggs hatch in 3-4 days and larvae pass through 7 molts to reach maturity. One life cycle is completed in 24 to 26 days. This pest causes damage to fruit trees viz., Falsa Fig. Aonla.

Studies on the occurrence, biology, field ecology and the nature and extent of damage by insect pests of cauliflower, sugarcane, maize, bajra and jowar

(a) Survey and identification of cauliflower pests have been undertaken The appearance, nature and extent of damage and the control measures are under study

(b) A record of pests of sugarcane occurring in different seasons in Udaipur was maintained and the following observations were made from July, 1968 to Feb 1969

Coleoptera (119), Orthoptera (27), Diptera (13), Hymenoptera (10), Hemiptera (6), Homoptera (14), Others (32).

PREPARATION OF KEY FOR IDENTIFICATION :

Work is in progress.

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Months	Top Attack %	borer Popu. %	Shoot Attack %	borer Popu. %	Pink Attack %	borrer Popu. %	Root Attack %	borer Popu. %	Pyrila Popu. %	Termi-to Sweep	Remark
July' 68	23	8	22	7	5	3	7	—	8	—	
August	20	7	17	4	7	3	10	—	27	—	
September	20	3	17	3	10	7	17	—	38	—	
October	20	7	20	3	13	—	4	—	30	—	
November	20	7	20	—	7	3	10	—	39	—	
December' 68	17	10	10	—	7	3	10	—	16	—	
January' 69	28	3	17	2	4	—	12	—	—	—	
*February	23	3	20	5	7	2	16	—	—	—	

*Since the crop was harvested after February no further observations could be made.

INVESTIGATIONS ON CHEMICAL CONTROL OF INSECT PESTS AND RELATED TOXICOLOGICAL PROBLEMS

Results of field experiments on the residual toxicity of insecticides against larvae of *Prodenia liture* reveal that endrin 30% EC @ 120 ml /100 litre of water proved to be more persistent than malathion or BHC In another experiment it was found that larvae of *P liture* could ingest the leaves of cauliflower treated with 0 07% of technical BHC and lead a normal life It was also found that with the increase in concentration there was a significant reduction in time of defection and beyond this value either the insects would die without passing excreta or would not respond to the food material

INVESTIGATIONS ON HOST-PLANT RELATIONSHIP NUTRITIONAL AND DIGESTIVE PHYSIOLOGY OF INSECT-PESTS

(a) The pH of the natural food, salivary glands, mid gut and hind gut of the tur pod bug *Clavigrella gibboca* has been determined and the eymatic studies completed

(b) In the food utilization studies in larvae of *Prodenia litura* total sugar of 5 host plants viz , cauliflower, cabbage, cotton castor, knolkhol and the excreta were estimated

The developmental incompatibility of french bean for the development of the pluse beetle *Callosobruchus maculatus* is well known Experiments on the studies of the inhibitor are in progress It has been found that the inhibitor with respect to lentil and soybean is heat labile

Results also indicate that seed coats of 4 of the pulses such as french bean, cowpea, pea and arhar play important role in oviposition of the test insect

(c) Several experiments viz , effectiveness of aqueous solution of sinigrin on the oviposition of *Athalia proxima* on different crops such as mustard, turnip, raddish and cauliflower and formulation of synthetic and semi synthetic diets are in progress

(d) Artificial diets for Prodenia litura and Achea janata have been prepared and successfully tested. The incorporation of linseed oil in diet could eliminate the abnormal wing formation and inability of the moth to emerge from the purparium.

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AGRICULTURAL BOTANY

GERM PLASM COLLECTION OF ECONOMIC PLANTS :

Work on the germ plasm collection of several economic crop plants including pea, cowpea, bean, onion has been started. The experiments on barley and other Rabi crops could not be taken up because of paucity of funds.

In case of onion collections were made from different part of Rajasthan and studied for their maturity (days) yield, protein content along with other botanical and agronomical characters. The varieties Giant and Country white were found to be superior to all other varieties tested. These will be tested at different regional stations before releasing them to farmers.

MUTATION IN ECONOMIC CROPS :

(a) Pea—In order to find out useful mutants i.e., high yielding, early maturing and disease and pest resistant, pea seeds were treated with the chemical mutagens Ethyl methane sulphonate (EMS) and Methyl methane sulphonate (MMS) were planted in field, during the month of Nov., 1968. Treated plants showed reduction in size and fertility with delayed maturity. Some chlorophyll mutants were also observed. Seeds obtained from this planting will be further tested for segregation of characters in next generation.

(b) Cytology of pea—In cytological preparation of pea material treated with different mutagenic agents, large number of chromosomal aberrations were observed both in Mitosis as well as in Meiosis. The

effect of gibberellic acid in relation to chromosomal and other aberrations with respect to mutation work is in progress

HORTICULTURE

COLLECTION, ACCLIMATIZATION AND PERFORMANCE STUDIES OF IMPORTANT FRUITS

Work on grapes, papaya, pomegranate, ber, guava and sitaphal has been taken up

(a) *Grapes* Planting of 40 grape varieties collected from different parts of the country has been done at Vallabhnagar Research Farm and plants from cuttings of 33 varieties have been raised in the nursery for subsequent planting among the 40 varieties already planted, very good growth of the following varieties has been observed Thompson seedless, Anab e Shahl, Khalili Bhokari, Selection 7 and Selection 94

(b) *Ber* One thousand 1 year old ber seedings have been raised in the nursery andare ready for plantation at Vallabhnagar Research Farm Forty two varieties are expected to be received from the Regional fruit Station, Bhahadur Garh, Patiala

(c) *Pomegranate* Plant of 6 varieties are maintained at the nursery-and another 14 are expected to reach here soon

(d) *Sitaphal* Good quality Sitaphal grows wild in several parts o Udaipur and Chittor regions In view of the popularity of this fruit it has been decided to established a progeny orchard at the Farm After extensive survey, fruits were collected and quality tested in the laboratory After several experiments it was found that seeds collected in one year should be sown next year i e after a period of dormancy

IMPROVEMENT OF PAPAYA

From a large number of collection, 32 varieties along with 7 other species of Carica were planted at the Research Farm, Vallabhnagar and their performance with respect to growth, yield and disease and pest resistance is being studied So far, the overall performance of the 3 varieties

Honeydew, Washington and Ceylon has been found to be better than the others. However, none of the varieties were mosaic resistant. The 7 *Carica* species did not survive. Selections are being made.

IMPROVEMENT OF IMPORTANT VEGETABLES :

Work on tomato, pea, chillies and onion has been started.

ESTABLISHMENT OF NURSERY :

Nursery for multiplication of ornamental, vegetable and fruit plants has been established. The plant material raised here are utilised for planting in different Research Farms of the University as well as selling to interested horticulturists.

EVALUATION OF CUCURBIES FOR RESISTANCE TO INSECT PESTS :

Sowing of various collections of watermelon, muskmelon, longmelon was done. Crosses have been made amongst the susceptible and resistant lines of watermelon. Fifty lines of muskmelon have been evaluated against the attack of fruit fly. Eighty lines of longmelon have been screened against the attack of red pumpkin beetle and fruit fly. Selfing and purification of genetic stock of watermelon and longmelon are in progress.

PUBLICATION :

Manohar M.S. and Sachan S.P.C.; (1969) Potentialities of horticulture in improving the agricultural economy, Krishak Samachar, 13 : 31-33.

AGRONOMY

STUDIES ON THE PHYSIOLOGY OF WEEDS :

It was found that 15% replenishment of N alongwith 0.5 kg. of simazine or atrazine applied as combined pre and post emergence treatment provided excellent chance of improving the production of maize and wheat and refucing losses of N due to weeds. This set of practice increased the yield of maize by 144.8% and wheat by 9.2% and reduced

weed dry water production by 77 0% and uptake of N by weed by 69% Simple application of triazine herbicides as pre emergence treatment was found to increase maize yield by only 60% Replenishment of N removed by weeds and adoption of pre and post emergence spray had significant effect on the efficiency in the use of triazine herbicides

COORDINATED ICAR SOBAME ON MODEL AGRONOMIC EXPERIMENTS

Six field experiments were conducted The data indicate the following

(a) Phosphorus was found to increase yield of both kharif and Rabi crops, and 60 kg P_2O_5/ha was optimum

(b) The rotation, maize, wheat, cowpea was found best followed by maize wheat maize (Cob)

(c) There was no significant difference between the yield of the two dwarf varieties S-227 and S 305 but both of them were superior to NP-718

AGRICULTURAL ECONOMICS

MARKETING OF WHEAT IN RAJASTHAN

The work started on 1-12 68 Selection of samples, framing of the schedules and their protesting have been done Markets have also been selected

ANIMAL HUSBANDRY

EFFECTIVENESS OF DIFFERENT METHODS OF UTILIZING AVAILABLE SOURCES OF GERM PLASM IN IMPROVING THE PRODUCTIVE PERFORMANCE OF POULTRY

The productive performance of the 3 strains (i) native Desi (DD) (ii) improved legthern (WW) and (iii) rhode island Red (RR) was tested The hen day egg production to 400 days' survival was 127 20 and 129 97 for 2 batches of WW, 112 24, and 122 97 for those of RR and 44 39 for DD

Crossing in general decreased fertility and improved hatchability in crosses involving DD females compared to DD. All crosses except that involving WW females and DD males performed better than controls upto 2 months as far as feed conversion was concerned thereby showing heterosis for this trial. Crosses involving DD females and WW or RR males showed considerable heterosis for WW and RR and RD showed considerable heterosis for egg production. RW performed best with performance efficiency (PEI) of 29.05 closely followed by WR and W with PEI of 28.58 and 23.05 respectively. PEI was lowest for DD at 14.14. Considerable improvement in egg number, egg size and feed conversion in crosses involving DD females (with WW and RR males) indicates that crossing with exotic breed is the quickest method of improving indigenous (Desi) poultry. Better combining ability of RR with native poultry is apparant from the production performance of DW, DR, WD and DD. However, RR also combines very well with WW.

The hatchability of fertile eggs of all the six 3 way crosses in general was very high (range 68.09-93. C_1) as compared to the six 2 way crosses (range 67-87-90.41) and 3 controls (range 60-55-54.63). Caracass study of males among groups at 12 weeks age revealed the superiority of two 3 way crosses viz., WD-R and WR-D for live weight attained, dressed body weight, available edible portion and efficiency of feed conversion.

TO STUDY THE INFLUENCE OF ENVIRONMENT ON CHICKEN IN DRY AND HOT REGION OF RAJASTHAN :

Poultry pens for roofing were completed. Four roofing materials viz., asbestos sheets, galvanised iron sheets (white on top), tiles on wooden base and thatch were tried and their cost of construction per sq. ft. was Rs. 12.79, 12.08, 11.98 and 10.21 respectively. There was difference in both maximum and minimum temperature among the different pens but this difference did not affect significantly the growth of chicks.

DAIRY SCIENCE

SIGNIFICANCE OF ENEROCOCCI AND COLIFORM BACTERIA IN DAIRY AND FOOD PRODUCTS :

Bacteriological quality of milk, Khoa and icecream, 220 samples each of market milk and khoa and 200 samples icecream as sold in

Udaipur city were analysed for the standard plate, coliform and enterococcus counts Representative sample of each product was also examined for the presence of coagulase-positive staphylococci to evaluate their potentiality for food poisoning

The market samples of milk were found to contain significantly high bacterial counts particularly the coliforms and enterococci indicating poor quality of milk from this source The milk supply of Udaipur could be classified into 3 grades, satisfactory, below 1 million SPC and 1,000 coliforms and enterococci/ml, acceptable between 1-10 million SPC and 1,000 10,000 coliforms and enterococci/ml, and unsatisfactory over 10 million SPC and 10,000 coliforms and enterococoi/ml The bacteriological qualities of khoa and icecream sold in Udaipur city were also found to be very poor The insanitary practices followed in the manufacture of these products should be responsible for the high bacterial counts Likewise, the high count of potentialy enterotexigenic staphylococci in these products constituted a real danger to public health

II DIRECTORATE OF EXTENSION EDUCATION (OFF-CAMPUS EXTENSION WORK)

The Extension organization of this University aims at assisting farm-families in Rajasthan to economically increase food production and improve their home making in order that they may have an improved level of living A four pronged approach has been envisaged to achieve this end The farmers, the farm women the rural youths, the Extension Workers and the district level officers connected with Agriculture, Animal Husbandry, and nutrition have been the reference group The approaches are

1 Training

2 Farm Advice

3 Youth Work

4 Communication

The achievements under each are as follows.

Training Programme

APPLIED NUTRITION TRAINING AND
REFRESHER COURSES :

The Development Department in coordination with the University of Udaipur sponsored six varied courses for officers and V.L.W's. The details are as follows :

Table-1

REFRESHER COURSES AND TRAINING IN APPLIED NUTRITION PROGRAMME

S No	Nature of Trainings	No of Trainings	Date		Duration (days)	No of Trainees	REMARKS
			From	To			
1	Lady Nutrition Exten Officers	2	1-11-68 1-2-69	15-11-68 15-2-69	15 15	39 42	Major emphesis in these trainings was given on ultivation of H Y.V and their Nutrition value
2	Lady Teachers and V L W's.	1	1-11-68	15-11-68	7	11	—do—
3	Extension Officers Training under A N P.	1	5-5-69	11-5-69	7	17	—do—
4	District Level Officers (Seminars on A N P).	2	7-10-68	11-10-68	5	40	—do—
5.	V.L W's Training (Higher Training in Agriculture)	2	20-8-69 3-9 69	2-9-69 16-9-69	15 15	50 (Kota) 36	Advance Training in Agriculture (Sawai Madhopur) —do—
6	Agriculture Extension Officers (Refresher Course).	1	15-12-68	31-1-69	45	23	Refresher Course.

B. FARMER'S TRAINING AND EDUCATION CENTRE :

The Farmer's Training and Education Centre organised various training programmes from time to time for the farmers, farm women and youth in modern farming techniques and home management during the period. Besides the institutional training, a number of demonstration training camps were also organised in Kharif and Rabi seasons.

The following table shows the number of persons trained at this training centre.

Table–2

TRAINING CAMPS ORGANISED BY THE FARMER'S TRAINING CENTRE

S No.	Name of Training	No. of training Courses organised	No. of Trainees attended the course
1.	One month course for young farmers.	3	138
2.	One week course for farmers.	10	354
3.	One week course for farm women.	13	536
4.	Fortnightly course for farmers.	1	23
5.	Fortnightly course for farm women.	1	21
Non-Institutional			
1.	Production Cum-Demonstration Camps :		
	(a) Farmers	119	3434
	(b) Farm women	28	837
2.	Discussion Group : (Charcha Mandal)		
	(a) Farmers	34	802
	(b) Farm women	8	205

A training programme for progressive farmers was organised from 2nd Dec. to 16th Dec. 1969, and three one-day training programmes were conducted for young farmers. Emphasis was laid mainly on horticulture, plant protection and crop production. An A.N.P. Exhibition at Dhani-Boraj was also organized.

Farm Advisory Service

During the year the Directorate of Extension Education has been actibely engaged in providing information to the farmers of the State through the publications, correspondence, service and training Udaipur, Bikaner and Jobner through the Extension Wings

The subject matter specialists continued to be busy in planning, organizing and conducting a large number of demonstrations on farmers' fields

DEMONSTRATION

Demonstration has been recognised as a most effective method of communicating the use of improved agricultural practices to the villagers The specialists conducted a number of demonstrations in the Girwa Block and also 35 National Demonstrations in each season on Maize and Wheat in Udaipur district These demonstrations were financed by the ICAR The important purpose of these demonstrations was to demonstrate the possibilities of raising 2 to 3 crops in a year with a view to maximising production These demonstrations provided an opportunity to the research Workers to demonstrate their skill on farmers fields The demonstrations were used for teaching many farmers in the areas where the demonstrations were located

All these demonstrations were two crop demonstrations, 30 with maize wheat and 5 with Bajra-Wheat rotation to be followed through the year with a targeted yield of 9 tonnes hectare

AGRICULTURE EXHIBITION

The following exhibitions and fain on the request of various Panchayat Samities of Udaipur district were organised —

Table–3

S. No.	Name of Exhibition	Date		No. of persons who visited (approx.)	Distance	Remarks
		From	To			
1.	Matri-Kundiya Fair Rashmi Panchayat Samiti, Rashmi.	9-5-68	14-5-68	10000	120 KM.	Exhibition was organized in an area of 60′ X 40′ major emphasis was given on high yielding varieties of wheat and maize, plant protection measures and actual specimen of fertilizers and seeds.
2.	Pratap Mela, Chavand P.S. Sarada.	29-5-69	31-5-69	3000	60 KM.	It was started 4 years back. Bhils (tribal people) participate in this fair.
3.	Debari, P.S. Girwa.	27-7-68	29-7-68	1000	8 KM.	Organized in village school at the time of inauguration of Middle school in Debari village on special request of the villagers.
4.	Pasu Mela, Kauria, P.S. Rajsamand.	23-9-68	26-9-68	5000	88 KM.	This exhibition was organized on the special request of P.S. Rajasamand at the time of Pasu Mela organized 8 KM away from village Kauria. Emphasis was given on cattle Development Programme and also on high yielding varieties.

S No	Name of Exhibition	Date		No of persons who visited (approx)	Distance	Remarks
		From	To			
5	Sanwalaji Panchayat Sahada	26 9 69	28 9 69	2000		This was organised only this year as Pasu Mela by P S Sahada in district Bhilwara A small stall was installed by the exhibition section of this Directorate
6	Lakadvas Panchayat	12-12 68	13-12 68	1000		Organized at the time of Regional consultatixe meeting of Farmers' Training centre
7	Nao, P S Mavli	22-12 68	24-12 68	2000	35 KM	This was organised first time in the area in the form of Vikas Mela Emphasis was given on high yielding varieties programme and plant protection measures
8	Rishab Deo P S Kherwara	11-3 69	12 3 69	3000	64 KM	Organized on the request of P S Kherwara
9	Jobner	18-3-69	19 3-69	10000		On the eve of Farmers' Fair and field-day on the campus of S K N College of Agri Jobner
10	Gogunda	21-3-69	23-3-69	2000	33 KM	Organised by the P S and Vikas Panchayat of village Gogunda

S. No.	Name of Exhibition	Date		No. of persons who visited (approx.)	Distance	Remarks
		From	To			
11.	Bari Sadri, P.S. Chotti Sadri.	27-3-69	28-3-69	5500	112 KM.	Organised on the request of the P.S. emphasis was given.
12.	Kareli, P.S. Sarada.	2-4-69	3-4-69	1000		Organised film show and exhibition.
13.	Jameshwar Mahadeo P.S. Sarada.	30-4-69	2-5-69	5000	27 KM.	Emphasis was given on high yielding varieties mostly tribal people visited the exhibition.
14.	Begu.	13-5-69	14-5-69	800		A small exhibition was organized covering all the agricultural aspects.
15.	Chawand.	18-5-69	19-5-69	2000		—do—
16.	Bali district, Pali.	22-6-69	26-6-69			Cultivation operation of Hybrid Bajra, Jowar Maize were covered. Emphasis was also given on poultry-keeping.

27 One-day exhibitions were also organized in the villages of different Panchayat Samitis of Udaipur district alongwith the one day training camps, organized by farmers training centre of this Directorate to educate the farmers and make them aware about the innovations in the field of agriculture 19580 people visited these one day exhibitions

A FARMERS' FAIR

A Farmers' Fair at Jobner was organized on 18th and 19th March, 1968 All the Departments of the College, Extension Departments of Udaipur and Bikaner and various departments of State Government participated in making the fair a success About 10000 people visited the exhibitions and demonstrations in the fair

FILM SHOWS

63 Film shows were arranged from 1st March 1968 to 30th June 1969, where 22760 people witnessed the shows The following films on high yielding varieties were screened

1 How to grow more Sugarcane
2 High yielding wheat
3 Growing maize
4 High Yielding Paddy
5 Hybrid Bajra
6 Hybrid Jowar
7 How to use M B Plough
8 Row cultivation
9 How to control pests
10 Safe use of Pesticides
11 Literacy for progress
12 Young farmers Club
13 Poultry Story
14 Our milk cooperative
15 Anthrex

ANIMAL HUSBANDRY AND DAIRY EXTENSION ACTIVITIES

Seven Commercial Demonstration Units in the practicing villages continued to work satisfactorily. One of the poultry keeper adopted poultry farming as his sole occupation. Two others have expanded the size of their units from 100 to 300 birds, thereby making poultry as a permanent subsidiary source of income.

All poultry farms in the Panchayat Samities of Girwa and Badgaon were visited from time to time. Suitable technical advice was given wherever required. The field problems of tick and worm infestation and occurence of coccidiosis were solved on the farm by demonstrating the use of various pesticides, wormicides and coccidiostat and also the spraying equipment. Use of improved methods and equipment and the method of storage and transportation of eggs were also demonstrated.

Various poultry keepers were helped to get better birds for their replacement by getting Rhode Island Red and White Leghorn crosses from the RCA Poultry farm. About 10,000 eggs were hatched at this farm during this season. Six hundred hybrid day old pullets were arranged for two poultry keepers.

Five coordinated programme with the local poultry cooperative society (Udaipur Kukut Utpadak Sahakari Samiti Ltd., Udaipur) in respect of feed making programme is working smoothly. It is an effort to make available good quality feed at reasonable price.

Advice was also given for the raising of calves, cheap concentrates for cattle and buffaloes.

Extensive touring was done and farmers were contacted both individually and in groups. Meetings of the youth clubs were attended and short discussions on animal husbandry held.

Lectures were also delivered to various groups of farmers and other trainees visiting the campus.

HOME SCIENCE FXTENSION

Home Science work has been carried out in a few villages by one lady extension worker A nursery school is conducted three afternoons each week for children between 3 5 years of age with an average of 20 children Training courses for women have been conducted in sewing and clothing repairs sanitation and cleanliness in the home, proper child care, caring for and preserving the family food supply and how to make and use a smokeless Chula and mud refrigerator (Janta shitak) Kitchen gardens were also maintained and supervised

FXTENSION WORK IN AGRICULTURAL ENGINEERING

The work has been initiated by assigning one Extension Specialist in the subject The work was initiated and prefabricated channels were constructed on the farm of several farmers The plans for making a land of about 30 acres in Bhoyno ki-Pacholi village as model farm with all soil conservation measures have been taken up The demonstrations in using 3-tined hoe, maize sheller and electrically operated thresher were quite successful The farmers showed great interest in Agricultural Engineering activities

COMMUNICATION CENTRE

The Communication Centre made a beginning in March 1968 As a part of the Extension Division of the Udaipur University, it serves as important communication agency for those who are engaged in farming It aims at reaching every farm family in Rajasthan It is preparing to act as a strong link between the agricultural University and the people for whom we exist

So far, the Centre has four fold activities, publication of Extension literature, timely postal guidance to farmers, radio communication with farmers and the University publicity

EXTENSION LITERATURE

The following literature has been published by the centre for farmers, farm women and Extension workers

१ गेहूँ एस २२७

२ गन्ने की खेती.

३. अंगूर

४. जीरा उगाओ

५. फार्म व्यवस्थापन के सिद्धांत

६. पपीता

७. संतरा

८. गृह-वाटिका—एक युवक प्रयोजना

९. कपास

१०. युवक मण्डल नेता मार्गदर्शिका

११. युवक मण्डल सदस्य मार्गदर्शिका

१२. भिण्डी

१३. बैंगन

१४. निम्बू (memiographed)

१५. हल्दी की खेती

CIRCULAR LETTERS :

१. गेहूँ एस २२७

२. चूहा उन्मूलन योजना

३. शंकर बाजरा

४. उदयपुर विश्वविद्यालय आपकी सेवा में

CHART :

१. चूहा उन्मूलन अभियान

A RURAL NEWS PAPER :

The Centre started "APNA PATRA", a rural newspaper to communicate new methods of farming to the farm families. Two thousand copies of the first issue (July 1969) have been circulated.

FARMERS' CORRESPONDENCE SERVICE :

With the introduction of High yielding varieties the farmers need to have regular guidance from Extension Workers. Because of many reasons this kind of guidance is not always readily available. Hence, many

farmers have utilized the services provided by the University for solving their day to day farm problems

Youth club members have shown special interest in sending their quarries on High Yielding Varieties

FARM RADIO

About 150 topics suggested by the University teachers and researchers were forwarded to the All India Radio, Jaipur

MINOR IRRIGATION AND WATER USE SCHEME

The Minor Irrigation and Water Use Schemes has the objective to give in-service training to officials of Agriculture and Irrigation Departments of the Government of Rajasthan Besides this, Farmers, V L W s and Irrigation Kamdara are also trained In the last five year plan this scheme was sponsored by the Government of India Now the scheme has been transferred to the State Government

TRAINING PROGRAMME

11 training programmes have been conducted uptil now since the the commencement of the scheme and 196 officials have been trained From the period 1st July, 1968 to 30th June, 1969 two courses were conducted The number of officials trained is given below

Batch No	Period	Officials Engineering	Agriculture	Total	State
X	1 8 68 to 29-11-68	8	11	19	Rajasthan
XI	2-12-68 to 27-2 69	4	8	12	,,

A field minor irrigation laboratory has been set up in order to demonstrate the principles of water measurement devices, inverted syphon, drop structures pipe culverts The trainees were given ample opportunities in handling levelling implements, studying irrigation structure, methods of irrigation, irrigation water conveyance and comparative study of cheap lining materials, etc There is a library in the scheme It has 265 volumes

EDUCATIONAL TOURS :

Educational tours were undertaken to study at first hand the operation of major, medium and minor irrigation schemes in the country. Tour details conducted in X and XI training period are as follows :

X Training (1st August,' 68 to 29th October, 1968).

Three types of educational tours were conducted :

1. One day field trip — 2
2. Short trips 5 days — 1
3. Long tour 13 days — 1

In one day trip the trainees visited irrigation tanks at Jaisamand and Rajsamand. In the short tour the trainees visited Jawaharsagar dam, Rana Pratapsagar Dam, Rajasthan Atomic power project and Gandhisagar Dam, etc.

In the long tour the trainees visited Sea erosion at Bombay, Vrindavan Garden and Shri Krishna Sagar Dam at Mysore, Agricultural University at Bangalore, Nagarjunsagar Dam at Hydrabad, C.W.P. Hydraulic Research Institute, Khadakvasla Dam and Meteorological Observatory at Poona.

XI Training (2nd December, 1969 to 27th February, 1969) :

1. One day field trip — 3
2. Long tour — 1

In one day trip trainees visited irrigation tanks at Jaisamand, Rajsamand and Udaipur.

In the long tour the trainees visited irrigation system for Grape seed production at Mandsore, various irrigation system on cotton and tubewell boring at Indore Agriculture College and different experiments being conducted on irrigation system and soil conservation at Hyderabad and Bangalore, Central Food Tech. Research Institute and Krishna Raj Sagar Reservoir at Mysore, Sugarcane Research Institute at Coimbatore, various problems on paddy cultivation, teak wood plantation by the forest department and Bank erosion by the impact of waves on shore, pawai dam and discovery of India B.H.D. Bhabha and Dairy Milk Coloney, etc. Bombay.

SPECIAL FEATURES

Evaluation of the trainees was done by mid-term test and final examination There were also periodical discussions and trainees sessions As a special feature the trainees experimented with different cheap lining material and tasted the efficiency by seepage test conducted with the help of constant head device fabricated at college workshop

RURAL YOUTH ORGANIZATION WORK

The idea of establishing young farmers' Clubs in the villages of Udaipur district has gained popularity with youths, their parents, school teacher, village level workers and village leaders It can be illustrated as follows

1	Number of Clubs in Kharif ' 68	—	10
2	Total number of members in Kharif ' 68	—	167
3	Number of clubs in Rabi 68 69 (includes one girls' club)	—	19
4	Total number of members in Rabi 1968 69 (see Appendix I)	—	378

We are still in the initial stages of the programme, which has a vast scope of expansion in the subsequent years

PROJECT WORK

The club members get training through worth-while projects in the field of Agriculture, Animal husbandry, home making, cottage industries and village and community improvement Each club member plans to undertake individually or groups, some useful project and keeps record of his activities and thus he or she learns by doing and earns while learning

MEETING WITH GUARDIANS

A few clubs held meetings with the guardians of their club members and discussed the club activities

Besides individual and group projects these clubs also took up community and village improvement programmes as follows

1 Cleaning of village wards and wells
2 Laying out school gardens and maintain them
3 Planting trees on the sides of village roads
4 Conducting adult education classes
5 Arranging Agricultural exhibitions and demonstrations

TRAINING CAMPS AND PRIZE DISTRIBUTION :

A three-day youth camp was organized at village Kanpur in Girwa Panchayat Samiti with the cooperation of Girwa Panchayat Samiti Staff from 13th to 15th January, 1969. 91 members from the 8 clubs of this Panchayat Samiti participated in the camp. Specialists of Directorate of Extension Education and Girwa Panchayat Samiti, demonstrated about laying out Kitchen-gardens, preparation of nursery seedling, compost and super compost making, dusting and spraying to control insect pests in crops and vegetables, nutritional value of various fruiis and vegetables, eggs, fishes, etc.

YOUTH CLUB :

The following is the progress of Youth work programme at Jobner Campus—

1. Ten youth clubs for school going children were organized.

2. Seven youth clubs for village youth were organised. The activities included :

(a) Films and shows.

(b) Demonstrations on different crops and vegetables.

(c) Adult literacy class.

(d) Games and Sports.

(e) Group discussions.

PART V

APPENDICES

APPENDIX 'A'

Information regarding transfers of the staff made during 1968 69 (July 1, 1968 to June 30, 1969)

Name and Designation of the person transferred	Transfer		Order No & Date	Remarks
	From	To		
Rajasthan College of Agriculture, Udaipur.				
Dr Babu Singh Siradhana, Lecturer in Plant Pathology	Lecturer, S K N College of Agril Jobner	Reader in Plant Pathology, Rajasthan College of Agriculture, Udaipur	F-2 (1-145) RCA/ 7388 90 dated 30-10-1968	Against Leave vacancy of Shri B M Gupta From 2-11 68
Shri B L Porwal, Lecturer in Agronomy	Lecturer, S K N College of Agriculture, Jobner	Lecturer, Raj College of Agriculture, Udaipur	Estt/F-2 (1-151) RCA/4388 96 dt 24-5-1969	Against the vacancy of late Shri Sarda From 31-5-1969
Shri M K Bhatnagar, Lecturer in Plant Pathology	"	"	No F 2 (2) 92 Estt/16219 dated 30-7-1968	Against the vacancy of Jobner From 1-8-1968,

APPENDIX 'A' (*Continued*)

Name and Designation of the person transferred	Transfer From	Transfer To	Order No. & Date	Remarks
Agricultural Experiment Station, Udaipur.				
Shri V.N. Mathur, Lecturer in Zoology.	M.B. College Udaipur	Agril. Expt. Station, Udaipur.	Estt/MBC/AG/ 6765-72 dated 8-9-1968.	—
Shri H.N. Sharma, Research Assistant.	PL–480 Poultry Breeding Res. Scheme, Udaipur.	Agril. Expt. Station, Udaipur.	Estt/DAE/68/ 2576-85 dated 8-9-1968.	
Shri M.S. Saroha, Asstt. Res. Officer.	S.K.N. College of Agril. Jobner.	PL–480 Scheme Physilogy of Weeds'', Udaipur.	Estt/F-2 (1-10) SKN/4333-39 dated 20-6-1968.	—
S.K.N. College of Agriculture, Jobner.				
Mr. M.C. Oswal, Lecturer in Physics.	C.T.A E. Udaipur.	Agriculture College, Jobner.	Order No. F.2 (1-132) Estt/4856-60 dt. 12-7-1968.	—
Mr. M.K. Bhatnagar, Lecturer in Plant Pathology.	Ag. College; Jobner	R.C.A., Udaipur	Order No. F.2 (1-39) RCA/5476-83 dt. 25-7-68.	

APPENDIX 'A' *(Continued)*

Name and Designation of the person transferred	Transfer		Order No. & Date	Remarks
	From	To		
Dr. V.S. Kavdia, Lecturer in *Entomology*.	—do—	—do—	No. F2 (1-22) SKN/6852-61 dt. 7-10-68.	
Dr. Babu Singh, Lecturer in Plant Pathology.	—do—	—do—	No. F2 (1-145) RCA/7388-97 dt 30-10-68.	Appointed as Reader at R.C.A., Udaipur.
Mr. B.L. Porwal, Lecturer in Agronomy.	—do—	—do—	No. F2 (1-151) RCA/4388-96 dt. 23/24-5-69.	
Mr. J.K. Verma, Lecturer in Agronomy.	—do—	Agril. Expt. Station, Udaipur.	—do—No. F. 2 (1-10) SKN/1857-66 dt. 21-12-68.	Appointed as Research Officer Ag. Expt. Station, Udaipur.
r. G.S. Saxena, Lecturer hysics.	—do—	—do— (Jobner)	-do-No. Estt. F.2 (1-63) SKN/35556 dt. 17-4-68.	Transferred from the post of Lecturer in Phy. to Lecturer in Soil Physics against

APPENDIX 'A' *(Continued)*

Name and Designation of the person transferred	Transfer		Order No. & Date	Remarks
	From	To		
				the post of Soil Physicist in the ICAR. Research Scheme on Soil Salinity, Irr. etc. (Jobner).
M.B. College, Udaipur.				
Dr. R.S. Saxena, Lecturer in Mathematics.	College of Tech. and Agril. Engineering	M.B. College, Udaipur.	F. 2 (1-110) RCA/4671-84 dated 8-7-68.	
Shri S.C. Choudhary	On deputation from S.K.N. College of Agril. Jobner to M.B. College, Udaipur.	College of Tech. and Agril. Engineering, Udaipur.	—do—	
Shri V.N. Mathur, Lecturer in Zoology.	M.B. College, Udaipur.	Agricultural Experiment Station, Udaipur.	Estt./MBC/Ag./18/6765-72 dated 28-9-1968.	

APPENDIX 'B'

Information regarding appointments made during the academic year 1968-69 (From July 1968 to June 30, 1969)

Department	Name of the person appointed with qualification	Designation	Mode of appointment (*University* Selection committee/college selection committee through whose recommendation appointment was made)	Appointment order No and Date	Nature of vacancy against which appointment was made (clear/Lien/leave etc) give details how clear vacancy occurred or against whose lien and leave the appointment has been made
Rajasthan *College of Agriculture, Udaipur*					
Agronomy	Dr Harigyan Singh, M Sc Ag, Ph D	Professor	University Selection Committee	No Est/F2 (1-15) RCA/3905-12 Dt 31 5 68	Promoted against clear vacancy from 16-7 1968
Agronomy	Dr O P Gupta, Reader M Sc Ag, Ph D	Reader	,,	No Est/F2 (1-9) RCA/3897-904 Dt 31-5 68	Promoted against clear vacancy from 16-7 68
tomology	Shri J C Sharma, Lectr M Sc Ag	Reader	,,	No F2 (1 23) RCA/3902-10 Dt 10 5 1969	Promoted against clear vacancy from 10-5-69

APPENDIX 'B' *(Continued)*

Department	Name of the person appointed with qualification	Designation	Mode of appointment (University Selection committee/college selection committee through whose recommendation appointment was made).	Appointment order No. & Date	Nature of vacancy against which appointment was made (clear/Lien/leave etc.) give details how clear vacancy occurred or against whose lien and leave the appointment has been made.
Horticulture	Mr. R.C. Khandelwal, M.Sc. (Ag.)	Lecturer	University Selection Committee.	No. F2 (1-113) SKN/3445-53 Dt. 8-4-69.	Against the leave vacancy of Mr. O.P. Pareek proceeded abroad.
Pl. Pathology	Mr. G.L. Khandelwal, M.Sc. (Ag.)	Jr. Lectr.	College Selection Committee.	No. Estt/23665-69 Dt. 15-10-68.	Against the leave vacancy of Shri P.R. Verma, Jr. Lecturer proceeded abroad.
ICAR Coordinated Scheme on soil salinity irr. etc.	Dr. T.C. Jain, M.Sc. (Ag.) Ph.D., D.Sc.	Agronomist	University Selection Committee.	Univ. order No. F2 (1-148) RCA/1300-7 Dt. 18-1-69.	
Directorate of Extension Education.					
Farmers Training and Education Centre.	Miss Suman Rani Bhatnagar M.Sc. Home Sci. Extn.	Instructor	"	No. Estt/F2 (1-142) RCA/5833-38 5th Aug. 68.	Vacant (Newly created post).

APPENDIX 'B' *(Continued)*

Department	Name of the person appointed with qualification	Designation	Mode of appointment (University Selection committee/college selection committee through whose recommendation appointment was made)	Appointment order No & Date	Nature of vacancy against which appointment was made (clear/Lien/leave etc) give details how clear vacancy occurred or against whose lien and leave the appointment has been made
Farmers Training and Education Centre	Shri J S Panwar M Sc Ag Extn	Instructor	University Selection Committee	No Estt/F2 (1-150) RCA/8063 70 Dt 21st Nov 1968	
Farm Advisory Service	Shri D S Vyas M Sc Ag Extn	Jr Lectr	Directorate Selection Committee	No DEE/UU/Est/6984 90 Dt 4th Oct , 1968	Vacant, due to appointment of Shri S N Mundra, as Instr in Farmers' Training Centre, Udaipur
College of Veterinary and Animal Science, Bikaner					
Anatomy	Dr M L Mathur, B Sc , B V Sc & A H M V Sc	Reader	University Selection Committee	No Estt/F2 (1-17) Vety/5827-32, Dt 5 8 68	Clear Vacancy due to the death of Dr J H Solanki
	Dr U B Singh, B V Sc & A H M V Sc	,,	—do—	No F2 (1 27) Vety/1684 90 Dt 5 2 69	Leave Vacancy of Dr M L Mathur

APPENDIX 'B' *(Continued)*

Department	Name of the person appointed with qualification	Designation	Mode of appointment (University Selection committee/college selection committee through whose recommendation appointment was made).	Appointment order No. and Date	Nature of vacancy against which appointment was made (clear/Lien/leave etc.) give details how clear vacancy occurred or against whose lien and leave the appointment has been made
atomy	Dr. Kalyan Singh, B.V. Sc. & A.H.	Lecturer	University Selection Committee.	No. F2 (1-55) Vety/1672-78 Dt. 5-2-69.	Lien vacancy to promotion of Dr. M.L. Mathur.
eep usbandry	Dr. A.L. Choudhary, B.V.Sc. & A.H., M.Sc. Ph.D.	Reader	,,	No. F2 (1-37) Vety/2154-61 Dt. 22-2-69.	Clear vacancy.
,,	Dr. B.R. Choudhary.	Lecturer	,,	No. F2 (1-50) Vety/2201-8 Dt. 22-2-69.	Lien vacancy due to promotion of Dr. A.L. Choudhary.
oultry .CAR cheme)	Dr. Dungar Singh B.V. Sc. & A.H.	Research Asstt.	College Selection Committee.	No. Estt/DAE/69/940-43, Dt. 17-2-69.	In the I.C.A.R. Scheme.

X

APPENDIX 'B' *(Continued)*

Department	Name of the person appointed with qualification	Designation	Mode of appointment (University Selection committee/college selection committee through whose recommendation appointment was made)	Appointment order No and Date	Nature of vacancy against which appointment was made (clear/Lien/leave etc) give details how clear vacancy occurred or against whose lien and leave the appointment has been made
School of Basic Sciences and Humanities (M B College), Udaipur.					
Hindi	Dr Alam Shah Khan, M A, Ph D (Raj)	Lecturer	University Selection Committee	Estt/UU/5728 34 Dt 3 8 68	Against the post vacated by Dr K C Shrotriya, Lectr due to his retirement
Economics	Dr B K Tandon, M A, Ph D (Agra)	Professor	University Selection Committee	Estt/MBC/AE/3/6187-92 Dt 7-9-1968	Against the post sanctioned by the U G C
Sanskrit	Dr G C Tripathi, M A, Ph D (Agra) D Phil (Frieburg W. Germany)	Lecturer	—do—	Estt/MBC/AE/117/5046 52 Dt 18-7-1968	Against clear vacant post
Drawing & 1t,	Shri L L Verma, M A (Udaipur)	Lecturer	—do—	Estt/MBC/AE/68/182/6193-98 Dt 7-9 68,	Against clear vacant post

APPENDIX 'B' (*Continued*)

Department	Name of the person appointed with qualification	Designation	Mode of appointment (University Selection committee/college selection committee through whose recommendation appointment was made).	Appointment order No. and Date	Nature of vacancy against which appointment was made (clear/Lien/leave etc.) give details how clear vacancy occurred or against whose lien and leave the appointment has been made
Drawing & Painting	Miss Rekha Mathur M.A.	Lecturer	University Selection Committee.	MBC/AE/68/183/7467-75 Dt. 1-11-1968.	Against the leave vacancy of Shri S.C. Sharma.
Mathematics	Dr. U.C. Jain M.Sc. (Raj) Ph.D. (Udaipur)	Reader	—do—	Estt/MBC/AE/38/4518-24 Dt. 1-1-7-68.	Vice Dr. S.P. Kaushik retired.
Physics	Shri D.S. Kothari M.Sc. (Allahabad)	Reader	—do—	Estt/MBC/8955-69 Dt. 12-8-67.	Against Vacant post.
Deptt of Physics.	Dr. U.N. Upadhyaya, M.Sc. (Alld.), Ph.D.	Reader	—do—	Estt/5561-68 Dt. 29-7-68.	Against the post sanctioned by the U.G.C. from 1968.
Deptt. of Chemistry	Dr. D.N. Purohit M.Sc., Ph.D. (Raj.)	Reader	—do—	Estt/5569-76 Dt. 29-7-68.	Against new post.
Deptt. of Commerce.	Dr. N.L. Hingorani M.Com., Ph.D. (Raj.)	Professor	—do—	F. Estt/MBC/AE/5241-46 Dt. 22-7-1968.	Against vacant post.

APPENDIX 'B' *(Continued)*

Department	Name of the person appointed with qualification	Designation	Mode of appointment (University Selection committee/college selection committee through whose recommendation appointment was made)	Appointment order No & Date	Nature of vacancy against which appointment was made (clear/ Lien/leave etc) give details how clear vacancy occurred or against whose lien and leave the appointment has been made
Zoology	Dr Bhoomittra Deo, M Sc, Ph D (Luck)	Reader	University Selection Committee	Estt/5354-61 Dt 29 7-1968	Against vacant post
—do—	Dr C L Mahajan, M Sc (Delhi) Ph D (Agra)	Reader	—do—	Estt/MBC/AE/190/3499 Dt 14-4 69	Newly created post
—do—	Shri H R Singh M Sc (Agra)	Lecturer	—do—	Estt/MBC/AE/184/1259 66 Dt 18-1-1969	Against clear vacant post
—do—	Shri V K Rajabanshi M Sc (Agra)	—do—	—do—	Estt/Misc/MBC/1275 91 Dt 18 1-1969	Against leave vacancy
)—	Shri P P Sood, M Sc (Udaipur)	—do—	—do—	—do—	—do—
)—	Shri S P Singh M Sc (Agra)	—do—	—do—	—do—	—do—

APPENDIX 'B' (*Continued*)

Department	Name of the person appointed with qualification	Designation	Mode of appointment (University Selection committee/college selection committee through whose recommendation appointment was made).	Appointment order No. and Date	Nature of vacancy against which appointment was made (clear/Lien/leave etc.) give details how clear vacancy occurred or against whose lien and leave the appointment has been made
Drawing & Painting	Miss Rekha Mathur M.A.	Lecturer	University Selection Committee.	MBC/AE/68/183/7467-75 Dt. 1-11-1968.	Against the leave vacancy of Shri S.C. Sharma.
Mathematics	Dr. U.C. Jain M.Sc. (Raj) Ph.D. (Udaipur)	Reader	—do—	Estt/MBC/AE/38/4518-24 Dt. 1-1-7-68.	Vice Dr. S.P. Kaushik retired.
Physics	Shri D.S. Kothari M.Sc. (Allahabad)	Reader	—do—	Estt/MBC/8955-69 Dt. 12-8-67.	Against Vacant post.
Deptt of Physics.	Dr. U.N. Upadhyaya, M.Sc. (Alld.), Ph.D.	Reader	—do—	Estt/5561-68 Dt. 29-7-68.	Against the post sanctioned by the U.G.C. from 1968.
Deptt. of Chemistry	Dr. D.N. Purohit M.Sc., Ph.D. (Raj.)	Reader	—do—	Estt/5569-76 Dt. 29-7-68.	Against new post.
Deptt. of Commerce.	Dr. N.L. Hingorani M.Com., Ph.D. (Raj.)	Professor	—do—	F. Estt/MBC/AE/5241-46 Dt. 22-7-1968.	Against vacant post.

APPENDIX 'B' *(Continued)*

Department	Name of the person appointed with qualification	Designation	Mode of appointment (University Selection committee/college selection committee through whose recommendation appointment was made)	Appointment order No & Date	Nature of vacancy against which appointment was made (clear/Lien/leave etc) give details how clear vacancy occurred or against whose lien and leave the appointment has been made
Zoology	Dr Bhoomittra Deo, M Sc, Ph D (Luck)	Reader	University Selection Committee	Estt/5354-61 Dt 29 7-1968	Against vacant post
—do—	Dr C L Mahajan, M Sc (Delhi) Ph D (Agra)	Reader	—do—	Estt/MBC/AE/190/3499 Dt 14-4 69	Newly created post
—do—	Shri H R Singh M Sc (Agra)	Lecturer	—do—	Estt/MBC/AE/184/1259-66 Dt 18-1-1969	Against clear vacant post
—do—	Shri V K Rajabanshi M Sc (Agra)	—do—	—do—	Estt/Misc/MBC/1275 91 Dt 18 1-1969	Against leave vacancy
—do—	Shri P P Sood, M Sc (Udaipur)	—do—	—do—	—do—	—do—
—do—	Shri S P Singh M Sc (Agra)	—do—	—do—	—do—	—do—

APPENDIX 'B' *(Continued)*

Department	Name of the person appointed with qualification	Designation	Mode of appointment (University Selection committee/college selection committee through whose recommendation appointment was made).	Appointment order No. & Date	Nature of vacancy against which appointment was made (clear/Lien/leave etc.) give details how clear vacancy occurred or against whose lien and leave the appointment has been made.
Zoology	Shri A.S. Dabholkar, M.Sc. (Bombay).	Lecturer	University Selection Committee.	Estt/Misc/MBC/1275-91 Dt. 18-1-1969.	Against leave vacancy.
Sociology	Shri Rajendra Singh, M.A.	Jr. Lectr.	College Selection Committee.	MBC/Est/68/5370 Dt. 26-8-68.	Against leave vacancy of Shri K L. Bhatia.
Botany	Shri T.R.K. Reddy M.Sc. (Udaipur) (2-1-69 to 15-3-69)	—do—	—do—	MBC/Estt/68/8520 Dt. 24-12-68.	Temporary post of Jr. Lectr.
Geography	Shri K.G. Sharma, M.A. (Raj.)	Cartographer	—do—	8528 Dt. 23-12-68.	Against newly created post.
Chemistry	Shri V.R. Dwivedi, M.Sc. (Jodhpur)	Jr. Lectr.	—do—	MBC/Estt/68/5089 Dt. 13-8-68 & MBC/Estt/68/65321 Dt. 9-10-68.	Against leave vacancy.

APPENDIX 'B' *(Continued)*

Department	Name of the person appointed with qualification	Designation	Mode of appointment (University Selection committee/college selection committee through whose recommendation appointment was made).	Appointment order No & Date	Nature of vacancy against which appointment was made (clear/Lien/leave etc.) give details how clear vacancy occurred or against whose lien and leave the appointment has been made.
Chemistry	Shri S.K. Banerjee M.Sc.	Jr. Lectr.	College Selection Committee.	MBC/Estt/68/5089 Dt. 13-8-68 & MBC/Estt/68/65321 Dt. 9-10-68.	Against leave vacancy.
—do—	Shri C.L. Jain M.Sc.	Jr. Lectr.	—do—	—do—	—do—
—do—	Shri R.P. Vajpayee M.Sc.	—do—	—do—	—do—	—do—
Department of Law.					
	1. Shri R.S. Verma	Honorary Lecturer	Temporary	No. Estt/Misc/Law 4351-55 Dt. 6th July 1968. 6156-60 Dt. 5-9-1968.	First two persons were appointed against one whole time lecturer's post created in 67-68. One against the post of Part time Permanent Lecturer.
	2. Shri R.C. Upadhyaya	—do—	—do—		
	3. Shri H.L. Mehta	—do—	—do—		
	4. Shri G.C. Saxena	—do—	—do—	No. Estt/Misc/Law/154 2212-25. 25-2-69.	Appointed against Shri R.C. Upadhyapa, resigned w.e.f. 24th October, 1968.
	5. Shri B.S. Bhandari	—do—	—do—	No. F2 (1-167) Law/2380 Dt. 5th March, 1969.	

APPENDIX 'C'

Statement showing the number of students on roll during the year 1968-1969 (College-wise)

Name of the college	Arts	Science	Law	Education	J.D.C.	Commerce	Agriculture	Ag. Engg.	HS	Vety.
1. Vidya Bhawan Rural Institute	62	137	...	...	...	...	...	...	...	...
2. Law Department	...	...	131	...	...	...	...	...	...	...
3. Udaipur School of Social Work	47	...	...	...	...	...	...	...	...	...
4. Lokmanya Teachers' Training College	...	...	...	229	...	...	...	...	...	...
5. M.B. College, Udaipur	808	771	...	...	68	351	...	...	...	...
6. M.V. Shramjeevi College	405	...	...	...	...	...	...	...	...	...
7. B.N. College, Udaipur	222	879	...	...	...	...	...	...	...	...
8. Meera Girls College, Udaipur	461	192	...	...	...	...	...	...	...	...
9. Vidya Bhawan Teachers' College, Udaipur		...	...	...	...	...	...	...	...	...
10. Rajasthan College of Agril. Udaipur	...	...	...	236	...	...	570	...	...	...
11. S.K.N. College of Ag. Jobner	...	...	...	...	...	...	554	...	...	...
12. College of Tech. & Ag. Engg. Udaipur	...	...	...	...	...	...	...	196	...	...
13. College of Home Science	...	...	...	...	...	...	...	...	122	...
14. College of Vety. & An.Sc. Bikaner	...	...	...	...	...	...	...	...	...	281

APPENDIX 'D'

A statement showing the number of students on Roll during year 1968-69 (Course and degree wise)

Class		Total
Pre-University		
Arts		168
Science		278
Commerce		68
Ist year T.D C		
Arts		596
Science		1052
Commerce		92
IInd year T D C.		
Arts		499
Science		402
Commerce		80
IIIrd year T.D C		
Arts		303
Science		134
Commerce		68
B A Honours Part I		4
B A Honours Part II		1
	Previous	Final
M A (Rural Sociology)	5	14
M A Hindi	40	17
,, English	13	13
,, Economics	37	31
,, Pol Sci	36	23
,, History	16	10

APPENDIX 'D' *(Continued)*

Class		Total
	Previous	Final
M.A. Geography	26	18
,, Sociology	12	13
,, Philosophy	10	5
,, Drawing and Painting	12	8
,, Sanskrit	10	8
,, Social Work	18	29
M.Sc. Maths	12	8
,, Physics	15	13
,, Chemistry	11	13
,, Botany	11	11
,, Zoology	12	10
M.Com.	22	21
J.D.C. Part I	41	
J.D.C. Part II	27	
LL.B. Ist Yr.		80
LL.B. IInd Yr.		51
B.Ed.		465
M.Ed.		29
(Agriculture Wing)		
Pre-Prof. I		60
Pre-Prof. II		332
B.Sc. (Ag.) I		167
B.Sc. (Ag.) II		175
B.Sc. (Ag.) III		221
M.Sc. (Ag.) Prev.		75
M.Sc. (Ag.) Final		94
B.Sc. Home Science I		39
B.Sc. Home Science II		36

APPENDIX 'D' *(Continued)*

Class	Total
B Sc Home Science III	47
B Sc (Ag) Engg I	27
B Sc (Ag) Engg II	43
B Sc (Ag) Engg III	40
B Sc (Ag) Engg IV	40
B Sc (Ag) Engg V	46
B V Sc & A H I	14
B V Sc & A H II	53
B V Sc & A H III	82
B V Sc & A H IV	102
M V Sc (Previous)	15
M V Sc (Final)	15

APPENDIX 'E'

Statement showing candidates registered for the Degree of Ph.D. during the period from July, 1968 to June, 1969.

Name of the candidate	Subject	Name of the Supervisor
1. Shri Bhagwat Singh Malik	"Genetic studies of growth and wool characters in Chokla sheep."	Dr. Madho Singh Reader in Animal Breeding and Genetics, Vety. College, Bikaner.
2. Shri Anuj Kumar Ghosal	"Water metabolism in Camel."	Dr. T. C. Appana Reader in Biochemistry, S. P. Medical College, Bikaner.
3. Shri Prem Dayal Mathur	"Role of microbiol population and the production of Volatile fatty acids in healthy and diseased cattle in Aridzone."	Dr. P. N. Mehrotra Prof. of Bacteriology & Pathology Vety. College, Bikaner.
4. Shri Ram Chandra Verma	"Economics of farm mechanization in Jaipur District of Rajasthan."	Dr. K. K. S. Chouhan Reader in Ag. Economics College of Agriculture Jobner.
5. Shri Devendra Kumar Kothari	"Urbaniaztion in Rajasthan."	Dr. A. N. Bhattacharya Reader in Geography M. B. College, Udaipur.

APPENDIX 'E' *(Continued)*

Name of the candidate	Subject	Name of the Supervisor
6 Shri Shiva Charan Lal Menaria	"History of Mewar from Maharana Jai Singh to Sangram Singh II (1680 A D to 1734 A D)"	Dr K S Gupta Lecturer in History, M B College, Udaipur
7 Shri Bheru Lal Suwalka	"Bhim Singh II (1778-1828 A D)"	Dr L P Mathur Lecturer in History M B College, Udaipur
8 Shri Shyam Lal Mandawat	"Economic Ideas in Jainism '	Dr B K Tandon Prof of Economics M B College, Udaipur
9 Shri Suresh Chandra Gupta	"To study the resistance of Bajra (Pendisetum Typhoides S & H) against smut disease caused by Tolyposporium Penicillarial "	Dr R Prasad Prof of Plant Pathology College of Agriculture Jobner
10 Shri Vazir Mohammed Sheikh	"The relations of the Jaipur State with the Marathas (1713 A D to 1818 A D)"	Dr K S Gupta Lecturer in History M B College, Udaipur
11. Shri B L Dhakar	"Regional Planning in Rajasthan "	Dr B K Tandon Prof of Economics M B College, Udaipur
12 Shri Bihari Lal Jain	भट्टारक सफल कीर्ति–एक अध्ययन	Dr R C Dwivedi Reader in Sanskrit M B College, Udaipur

APPENDIX 'E' *(Continued)*

Name of the candidate	Subject	Name of the Supervisor
13. Shri Shyam Kishor Agarwal	"Floristic and Ecological studies on deciduous forests of Gogunda and Prasad (Udaipur) South East Rajasthan."	Dr. L. N. Vyas Lecturer in Botany M.B. College, Udaipur.
14. Shri Chhail Bihari Mathur	"An analytical study of Children's paintings as indicators to their personality patterns."	Dr. (Mrs.) Indu Dave Reader in Education Vidya Bhawan Teachers' Training College, Udaipur.
15. Shri Arvind B. Pathak	"Study of the factors differentiating high-achieves and low achieves in Science."	—do—
16. Shri Surendra Singh Rathore	"Effect of Crop management and soil stablisers on grade of potato tubers in heavy soils."	Dr. H. G. Singh Prof. of Agronomy Rajasthan College of Agriculture, Udaipur.
17. Shri Ram Chandra Khandelwal	"Evaluation of genetic stock of watermelon (Citrullus lanatus) thumb (manf) against resistance to fruit fly (Dacus cucurbitae) and exploitation of heteros with regard to resistance to fruit fly and fruit characteristics."	Dr. Prem Nath Reader in Horticulture College of Agriculture Jobner.

APPENDIX 'E' *(Continued)*

Name of the candidate	Subject	Name of the Supervisor
18 Shri T B Anil Kumar	' Factors affecting the survival Phytopathegenic bacteria with special reference to their relationship with actinomycetes	Dr B P Chakraverti Bacteriologist Agri Expt Station Udaipur
19 Shri Sheo Murti Prasad Naik	"Studies on plant parasitic nematodes and fungi associated with citrus decline in Rajasthan with special reference to tylenchulus semipenetraus and fusarium species '	Dr B S Yadav Nematologist Plant Pothology Research Division Agri Expt Station Udaipur
20 Shri Anand Prakash	"Breed Characteristics & Traits of Economics importance in Chokla sheep "	Dr Mohan Singh Dean Veterinary College, Bikaner
21 Shri Thummala Gopal	"The Biology of algae in waters polluted with industrial wastes in Rajasthan "	Dr H D Kumar Prof of Botany M B College, Udaipur
22 (Mrs) Rekha Sharma	आधुनिक हिन्दी साहित्य के विकास मे राजस्थान का योग	Dr Ram Gopal Sharma 'Dinesh' Lecturer in Hindi, M B College, Udaipur

APPENDIX 'E' *(Continued)*

Name of the candidate	Subject	Name of the Supervisor
23. Shri Surendra Singh Bhandari	"Mossabaur effect."	Dr. J. Verma Prof. of Physics. M.B. College, Udaipur.
24. Shri Om Prakash Sharma	"Elastic Scattering of Gamma Rays."	—do—
25. (Mrs.) Sneh Anand	प्रेमचन्दोत्तर हिन्दी उपन्यासों में महानगरीय जीवन का चित्रण	Dr. Dev Raj Upadhyaya Reader in Hindi M. B. College, Udaipur.
26. (Miss.) S. K. Verma	"Biology of reproduction in some Indian Lizards with special reference to morphology and histochemistry of ovarian changes."	Dr. S. S. Guraya Reader in Zoology M.B. College, Udaipur.
27. Shri Ganpat Lal Mandot	"Labour indebtednes in sugar mill industry in Rajasthan."	Dr. P. K. Srivastava Lecturer in Commerce M. B. College, Udaipur.
28. Shri Ambika Prasad Sharma	"Development of professional education in Rajasthan."	Dr. L. K. Oad Reader in Education Vidya Bhawan Teachers Training College, Udaipur.

APPENDIX 'E' *(Continued)*

Name of the candidate	Subject	Name of the Supervisor
29 Shri Shanti Lal Kothari	' Studies on the Associative growth of lactic Acid Bacteria in starter cultures "	Dr V K N Nambudripad Research office Bacteriology Dairy Microbiology Division, Dairy Science College, NDRI Karnal
30 Shri K Shivarama Krishna Murti	' Studies on the prevention and control of pulse beetles bruchus chinensis Linn in the stored pulses "	Dr B P Shrivastava Prof of Entomology College of Agriculture Jobner
31 Shri S C Sharma	"Antibody formation in protasoa Diseases of Domestic animals	Dr P N Mehrotra Prof of Bacteriology & pathology, Vety College, Bikaner

APPENDIX 'F'

Results of main examinations held in March, April, May 1969

S. No.	Class	No. of candidates Appeared	Passed				Total
			Ist Div.	IInd Div.	IIIrd Div.	Passed	
Faculty of Arts							
1.	Pre-University (Arts)	200	6	65	26	—	97
2.	First Year T.D.C. (Arts)	823	—	—	—	509	509
3.	Second Year T.D.C. (Arts)	638	—	—	—	401	401
4.	Third Year T.D.C. Arts (New Split Scheme)	332	5	105	156	14	280
5.	Old Split Scheme	17	—	—	10	—	10
	Composite Scheme	23	—	3	—	—	11
	1967 Scheme	30	—	4	11	—	15
6.	B.A. (Hons.) Part I	4	—	—	—	4	4
7.	B.A. (Hons.) Part II	1	—	—	—	—	1
8.	M.A. (Prev.) Philosophy	6	—	—	—	5	5
9.	M.A. (Final)	5	2	2	1	5	5
10.	M.A. (Previous) Geography	26	—	—	—	21	21
11.	M.A. (Final) Geography	18	3	11	4	—	18
12.	M.A. (Previous) Drawing & Painting	1	—	—	—	1	1

APPENDIX 'F' (Continued)

S.No. Class	No. of candidates	Passed Ist Div.	Passed IInd Div.	Passed IIIrd Div	Passed	Total
13. M.A. (Final) Drawing of Painting	10	3	5	...	...	8
14. M.A. (Previous) Sanskrit	2	...	...	...	2	2
15. M.A. (Final)	8	7	1	...	...	8
16. M.A. (Previous) Hindi	34	...	...	...	31	31
17. M.A. (Final) Hindi	36	4	26	2	2	34
18. M.A. (Prev.) Rural Sociology	8	...	...	..	8	8
19. M.A. (Final) Rural Sociology	5	...	4	1	...	5
20. M.A. (Previous) English	13	...	..	...	5	5
21. M.A. (Final) English	18	1	6	9	...	16
2. M.A. (Previous) Sociology	14	...	...	..	14	14
. M.A. (Final) Sociology	15	4	10	1	...	15
4. M.A. (Previous) Economics	42	...	...	..	29	29
M.A. (Final) Economics	41	1	20	13	1	35
M.A. (Previous) Social Work	17	...	...	...	16	16
27. M.A. (Final) "	29	1	20	7	...	28

APPENDIX 'F' *(Continued)*

S. No.	Class	No. of candidates Appeared	Passed				Total
			Ist Div.	IInd Div.	IIIrd Div.	Passed	
28.	M.A. (Previous) Political Science	58	...	...	...	46	46
29.	M.A. (Final) ,,	40	3	16	11	...	30
30.	M.A. (Previous) History	14	...	...	...	13	13
31.	M.A. (Final) History	23	4	13	4	...	21
	Semester Scheme						
32.	M.A. (Prev.) Sanskrit	8	...	...	...	8	8
33.	M.A. (Prev.) Drawing & Painting (For repeaters)	2	...	...	...	0	0
34.	M.A. (Prev.) Drawing & Painting	10	...	...	...	10	10
35.	M.A. (Prev.) Sanskrit (For repeaters)	2	...	...	...	2	2
36.	M.A. (Prev.) Philosophy	5	...	...	...	5	5
37.	M.A. (Prev.) History	10	...	...	...	10	10
38.	M.A. (Prev.) Hindi	19	...	...	...	19	19
	Faculty of Science						
1.	Pre-University	316	35	79	17	...	131
2.	I Year T.D.C.	1114	...	...	...	533	533

APPENDIX 'F' *(Continued)*

S No	Class	No of candidates Appeared	Passed				Total
			Ist Div	IInd Div	IIIrd Div	Passed	
3	II Year T D C	364				227	227
4	III Year T D C (Split New & Old Scheme)	127	5	75	20	1	101
5	III Year T D C (1967 & 1968 Composite Scheme)	6		1			1
6	M Sc (Previous) Physics	12				11	11
7	M Sc (Final) ,,	15	6	9			15
8	M Sc (Previous) Mathematics	5					
9	M Sc (Final) Mathematics	10	3	2	1		6
10	M Sc (Final) Zoology	10	4	6			10
11	M Sc (Previous) Botany	11				9	9
12	M Sc (Final) ,,	11	2	9			11
13	M Sc *(Previous) Chemistry*	13				9	9
14	M Sc (Final) ,,	13	3	9			12
	Semester Scheme						
15	M Sc (Previous) Mathematics	6				5	5
16	M Sc *(Previous) Zoology*	10		—		10	10

APPENDIX 'F' *(Continued)*

S. No.	Class	No. of candidates Appeared	Passed				Total
			Ist Div.	IInd Div.	IIIrd Div.	Passed	
17.	M Sc. (Previous) Chemistry	4	...	...	...	4	4
	Faculty of Commerce						
1.	Pre-University	73	2	19	6	...	27
2.	Ist Year T.D.C.	109	...	...	...	69	69
3.	II Year T.D.C.	82	...	...	...	58	58
4.	III Year T.D.C. (New & Split Scheme)	70	3	29	35	1	68
	(1967 Scheme)	4	...	...	2	...	2
5.	M.Com. (Previous)	21	...	...	...	18	18
6.	M.Com. Final)	25	3	11	4	...	18
7.	J.D.C. (Part) I	31	...	...	...	18	18
8.	J.D.C. (Part) II	25	1	9	10	...	20
	Proficiency & Certificate Examination						
1.	Proficiency in Tamil	6	...	...	...	5	5
2.	Proficiency in Sanskrit	1	...	...	...	4	4
3.	Certificate Course in Type writing	7	...	...	...	4	4

APPENDIX 'F' (Continued)

S.No. Class	No. of candidates Appeared	Passed				Total
		Ist Div	IInd Div	IIIrd Div	Passed	
Faculty of Law						
1. LL.B. (Previous) Old Scheme	1015	..	...	...	9	9
2. LL.B. (Final) Old Scheme	3	. .	2	...	...	2
3. LL B. (First Year)	62					
(First and Second Terms combined)		...	...	...	...	60
4. LL B. (Second Year)	62					
(First Year and Second Term combined)		...	..	...	50	50
Faculty of Education						
1. B.Ed. (Theory)	473	2	189	282	...	473
(Practice)	475	35	405	35	...	475
2. H.Ed.	30	3	22	...	...	25
riculture Wing						
. Pre-Professional	332	...	...	...	170	170
B.Sc. (Ag.)	221	. .	18	...	182	200
B Sc. (Home Science)	47	...	1	...	31	32

APPENDIX 'G'

Results of Supplementary Examinations held in July, 1969

Name of the Exam nation	No of candidates Appeared	Passed in Division I	II	III	Passed	Total
1 Pre University (Arts)	70		12	10		22
2 Pre University (Science)	51		16	7		23
3 Pre University (Commerce)	29		5	7		12
4 Ist Year T D C (Arts)	254				176	176
5 Ist year T D C (Science)	140				86	86
6 Ist Year T D C (Commerce)	59				23	23
7 II Year T D C (Arts)	190				150	150
8 II Year T D C (Science)	112				88	88
9 III Year T D C (Arts) New & Split Scheme	33		2	20		22
Scheme of 1967	15			6		6
10 III Year T D C (Science) Split Scheme	9		5	3		8
Scheme of 1967	1			1		1
11 III Year T D C (Commerce)	3			3		3
J D C Pt I	1				1	1

APPENDIX 'H'

Statement showing candidates who have been awarded Ph D Degree from 1st July, 1968 to 30th June, 1969

Name of the candidate	Subject
1 Shri Shiv Kumar Sharma	Education
2 Shri Shanti Lal Bhardwaj	Hindi
3 Shri M Rangarajan	Plant Pathology
4 Shri B S Murdia	Economics
5 Shri Gokul Singh Shekhawat	Agronomy
6 Shri Goverdhan Lal Maliwal	Soil Science
7 Shri Hardatt Sharma	Hindi
8 Shri Badri Lal Baser	Soil Science

APPENDIX 'I'

SIXTH CONVOCATION (28th January, 1969)

WELCOME SPEECH OF THE VICE-CHANCELLOR :

Mr. Chancellor, Shree Shriman Narayanji, Your Highness, Graduates of the year, Ladies and Gentlemen.

1. I now rise to extend to our Guest of Honour Shriman Narayanji a cordial and respectful welcome–and, he will understand when I also add 'a grateful welcome'. T[illegible] we have also the privilege of the presence of Sardarni Sahib[illegible] Sir, have several times favoured with your visit[illegible] 's histori[illegible] h the week-end flow of visitors from on[illegible] er, A[illegible] d Udai[illegible] come closer together[illegible] could [illegible] as th[illegible] the satelite town of the[illegible] of t[illegible] I hes[illegible] in the presence of our[illegible] Hi[illegible] ing [illegible] g neutrality of an Ir[illegible] mis[illegible] r p[illegible] hmedabad nor impa[illegible] the University how[illegible] t to [illegible] Shri[illegible] i is coming f[illegible] the[illegible] that [illegible] I[illegible] y a faw w[illegible] abou[illegible] of [illegible] In the insta[illegible] it is a [illegible] mar[illegible]

2[illegible] ped w[illegible] Naray[illegible] hian i[illegible] career.

i[illegible] ic [illegible] ity [illegible] my [illegible] om-

(iii) and (iv) And from 1964 he was India's Ambassador in Nepal until he came to hold his present assignment as Governor of Gujarat

Steeped in Gandhi s philosophy, his three facets of career were only natural

(v) For example, he was Chairman of the Planning Commission's Prohibition Enquiry Committee (1954 55)

(vi) He was a member of the All India Khadi and Village Industries Commission (1956 59)

(vii) He was also President of the All India Nature Cure Association (1960 64)

3 From among his various publications, two have interested me-namely

(a) Constructive Programme for Students

(b) The recently published brochure—"Gandhi Centenary and our Responsibility

To pass now to our University and ourselves, let me quote two remarks from his brochure

"I find that the National Gandhi Centenary Committee has appointed a Sub Committee for securing basic amenities to the people, more especially drinking water It would be possible to achieve a measure of success in this sphere, only if we undertake large scale programmes even by curtailing several other projects which could be accorded a much lower priority'

This is exactly our thinking and what we propose to do

Last summer, I made the suggestion and it was accepted by students and teachers that to celebrate the Gandhi Centenary, we should raise some 20 to 25 thousand rupees to help solve the drinking water problem round about the villages Under this scheme, I am glad , students will contribute each Rs 2/- and teachers, a

4. But what about the other pressing problems of education such as falling standards, and the wave of students' unrest which swept from Barkeley to Berlin and beyond ?

We, Sir, believe in unilateral performance of duty and have now closely identified three measures which we should and could adopt–leaving aside the problem of financial uncertainities over which we have little control.

The other day Dr. Jayant Narlikar told us that the expansion of the Universe is correlated with the arrow of time having the same direction in the phenomena in the three fields of :

(i) Thermo-dynamics.

(ii) Electro-dynamics,

and (iii) Cosmology.

The thought occurred to me to express our efforts in similar language.

The expansion of quality in education, its improvement, is also closely correlated with the change in our attitudes which has to Deunidirectional in the three fields of :

(i) Academics,

(ii) Decision making,

and (iii) Communication.

(i) In academics, there is now the realization of the urgent need to eliminate the emerging polarisation i.e., confrontation between students and teachers.

(ii) In decision making, too, we are conscious that positive measures have to be taken to remove confrontation between authorities and faculty members.

(iii) In communication, we, all universities in this State, have already taken steps to remove the mutual allergy between Hindi and English. Let me clarify. We have decided, State Govt. fully agreeing with us, that—

"English and Hindi are to be taught compulsorily upto the end of the Ist Year TDC—which is, so to say, the 12th year of schooling Any one who fails to qualify in these, is allowed to proceed to 2nd and 3rd year TDC, but he has to clear these subjects before taking the degree"

This accords fully with the recommendations of the Education Commission

I feel hopeful, even confident, that if we sincerely carry out these measures in the three fields, a good many of our problems will be resolved

Mr Chancellor, this sixth Convocation coincides with the Gandhi-birth Centenary year and we are singularly fortunate in having in our Guest a true follower in the Mahatma's thinking As such, he is the best guide to the graduates of the year

I now request him to address the Convocation

APPENDIX 'J'

ANNUAL CONVOCATION ADDRESS BY HON'BLE SHRIMAN NARAYAN, GOVERNOR OF GUJARAT

Friends,

I am deeply grateful to the authorities of the University of Udaipur for having invited me to address their Annual Convocation during the Gandhi Centenary Year. I should like to extend my warm felicitations to all the students of the University who have received their Degrees to day. I am confident that they would recognise their special responsibilities towards the motherland in the sacred memory of the Father of the Nation. It is also a happy coincidence that children born soon after the dawn of Indian freedom in 1947 have attained the age of 21 years with full civic and franchise rights during the Centenary period. We expect of these youngmen to lay the secure foundations of a new India in accordance with Gandhiji's dreams. They have our best wishes for the success of their mission.

In the light of my experience during visits to many foreign countries I am convinced that the students of India are in every way comparable to the youngmen of any other country in the world. Given the necessary facilities and opportunities, they could rise to the greatest heights of achievement in different spheres of national development. I have also visited almost all the important prestige projects in India undertaken during the three Five Year Plans, and I have invariably found that our young scientists, engineers and technicians have been able to show excellent results in running them with a sense of keen responsibility. Our students have also acquitted themselves very creditably in foreign Universities, including highly technical institutions of America and Europe. We have, therefore, every reason to be proud of our youngmen and women, from amongst whom the new leaders of India would rise and shape the destinies of the nation.

This University was started as a purely agricultural insiitution of higher education, but has now added several other Faculties to its academic life. Nonetheless, I do hope that the agricultural bias of this University continues to receive requisite attention and importance. I need hardly reiterate that India, despite comprehensive economic planning

during the last two decades still remains, by and large, an agricultural country and would continue to remain so for decades to come While every effort has to be made to diversify the economy of India by establishing small, medium and big industries of different types and building up an infra-structure for supporting and developing them, the highest priority will have to be accorded to augmenting our agricultural production to the maximum extent possible and with the greatest speed feasible We have not only to achieve selfsufficiency in food, but also to grow different raw materials in adequate quantities for running many of our traditional industries which occupy a place of pivotal importance in the national economy In my view, food self-sufficiency is not only an essential economic objective, but is also indispensable for strengthening nationl defence and security A hungry nation could never stand erect and boldly face difficult and menacing challenges of political pressures, economic rivalaies and armed conflicts. In the fulfilment of this vital task, Universities like yours must necessarily play a crucial role in equipping the Indian peasant with uptodate science and technology for stepping up the productivity of land with speed and efficiency

It is often alleged that the Indian farmer is very conservative and does not take to modern scientific practices easily This is an entirely erroneous notion What we term as conservatism is, in fact, the struggle of the Indian peasant for economic survival and financial viability Due to his marginal existence, he is not in a position to incur undue risks by trying all sorts of recommended by a host of officers and socalled agricultural experts who, in many cases, do not possess much of practical experience themselves But, once our farmer sees the tangible results of new techniques with his own eyes on the fields of his village, he is willing to walk a hundred miles to obtain the required information, equipment and resources for implementing those practices on his own farm During my extensive tours in the Indian countryside, I have always found the Indian farmers possessing robust commonsense and practical experience of agriculture in a remarkable degree Although he is poor and illiterate, he cannot be called uneducated and backward If we make available to him the necessary knowledge, resources and inputs, he is sure to attain high levels of performance comparable to the best farmers in the world Students passing out of various Universities must, therefore, approach these farmers in a spirit of' , treat them as esteemed elders in the vital sector of

It is this rational synthesis between the old and the new methods of farming which would enable us to develop our agriculture along sound and healthy lines.

Basically, the problem of Indian farmer is the provision of adequate water facilities through minor, medium and major irrigation works. In the Sanskrit language, water is called *'Jeewan'* or life, because without it nothing grows or prospers. In many parts of our country, especially in your own State of Rajasthan, the parched soil could be turned into green fields and rich orchards if its thirst could be quenched with plentiful water from wells, rivulets, rivers and reservoirs. That is why the Planning Commission has now conceded the highest priority to irrigation projects in the agricultural sector of economic growth. Without adequate irrigational facilities, the use of better seeds, chemical fertilizers and improved implements is rendered ineffective and fruitless.

We have so far been talking at length about soil conservation, and in several parts of the country this work has been undertaken extensively in a scientific manner. It is now high time we devoted even greater attention to the modern techniques of water conservation. We must prevent by various devices the flowing away of valuable waters into the rivers and, ultimately, the seas. Even in arid areas like Rajasthan valuable water during the rainy season could be conserved effectively by planning comprehensive schemes of check-dams, village ponds and tanks. Such devices could not only provide surface or lift irrigation to millions of our farmers, but also raise the water table of countless wells in the countryside.

It is significant to know that thousands of years ago, during the age of *'Mahabharat'*, India followed a system of widespread minor irrigation works in the rural areas. While visiting the Court of Yudhishthir, Rishi Narad asked the King a hundred questions, out of which three related to farming. The first question was : "Rajan ! does agriculture in your kingdom depend on rains ?" It was, indeed, a bold question which we dare not put to the Government even today. But the reply to this question is contained in the second query of Narad : "Are there wells and tanks in every village of your kingdom ?" And the third question was the most important : "Are the village wells and tanks in your State repaired annually ?" It is, indeed, unfortunate that our minor irrigation

works to this day are not being maintained properly, and hardly any funds are earmarked for their annual repairs The Planning Commission has repeatedly asked all the State Governments to allot adequate amounts for the maintenance of various irrigation schemes The system of village planning for agriculture which was followed in this ancient land even during the *Mahabharat* times will have to be revived with great care and devotion, especially in areas like Rajasthan

A word about fertilizers There is no gainsaying the fact that the use of chemical manures is conducive to a substantial increase in agricultural productivity, and many countries in the West as well as in the East have been able to achieve a break through in agriculture by the intensive application of these artificial fertilizers Even so, recent experience in countries like Japan has conclusively proved that these fertilizers must be properly mixed up with green and compost manures in order to preserve the fertility of the soil in a balanced manner The exclusive use of chemical manures is likely to injure the texture of the land and sharply reduce its productivity I toured Japan a few years ago quite extensively in order to find out how their average produce per acre was more than three times that of India The Japanese farmers mentioned to me one of their rural sayings that the excessive use of artificial manures was good for the parents but bad for the sons On further enquiry, they explained to me that heavy doses of chemical fertilizers resulted in bumper harvests for a few years, subsequently, production went down steeply owing to the loss of soil fertility It is, therefore, desirable to learn from the experience of Japan and educate our farmers in mixing chemical and natural manures in proper proportions after getting their soils analysed properly through the extension agencies

I would also like to underline the importance of animal husbandry in strengthening the base of Indian agriculture In a developing country like ours, it is futile to expect large scale mechanisation of agricultural processes in the forseeable future With fragmented and scattered land holdings, our farming will have to depend for many years to come on good draught cattle which could be used for a variety of purposes like ploughing, irrigation as well as transport In order to obtain powerful bullocks, it is essential to develop good breeds of cow in different regions I was astonished to find in Japan that the farmers were now increasingly tending healthy cows on their farms In the course of our

discussions, they pointed out : 'In place of tractors and power-tillers, we are popularising the use of the cow because she gives us good bullocks for ploughing operations, and, in addition, provides us with milk and manure'. And they added : 'Sir, we are gradually discarding the machine because it gives neither milk for our children nor manure for our fields.' In India, we only worship the cow without taking proper care of her health and well-being. Our ancestors had given a religious background to the cow mainly because she constituted the essential base of our rural economy. We should, therefore, make concerted efforts to develop the cow breeds in a scientific manner in order to buttress various schemes of agricultural development.

Alongside of scientific agriculture and animal husbandry, it is imperative to organise a network of village and cottage industries based on local raw material like cotton, sugarcane, oil-seeds and fibres. Gandhiji underscored the importance of these rural industries from thestandpoint of ameliorating the socio-economic conditions of the countryside. In most of our villages today, notwithstanding the three Five Year Plans, agriculture continues to be the sole occupation of the people. In case of floods or droughts, the population is left with no other productive work for their livelihood and the Government is obliged to start famine relief works of a temporary nature. In order to broadbase and enrich our village economy, it is incumbent on us to establish agroindustries on a very wide scale with the active assistance of the Panchayati Raj institutions. In brief, without this traingular base of agriculture, animal husbandry and village industries, our plans of national development would not succeed in solving the pivotal problems of hunger, poverty and unemployment.

India is passing today through a difficult phase in the annals of her economic growth since Independence. Unhappily, after the completion of the Third Five Year Plan, it has not yet been possible to launch the Fourth Plan, according to schedule, on account of a number of unforeseen complications. We, however, hope that the next Plan will now commence definitely from the new fiinancial year. Successive droughts during the last two years imposed heavy strains and stresses on the economy and slowed down the tempo of our agricultural and industrial progress. A good harvest last year and an equally rich harvest expected to be reaped this year have created an optimistic climate in the country, and we hope to turn the corner and march ahead on the road to prosperity

with greater confidence in the years to come Moreover, with fading prospects of foreign assistance, India will have to strain every nerve to mobilise her own internal resources to the maximum extent during the Fourth Plan period This would necessitate the exercise of utmost austerity and economy all along the line Mahatma Gandhi had always laid great stress on the sprit of *Swadeshi* and 'simple living and high thinking' We must now rekindle this spirit of self help and self respect in the sacred memory of the Father of the Nation during the Centenary Year There is no harm in receiving external financial assistance from friendly countries in a limited measure Excessive dependence on others, however, tends to weaken our own initiative and resourcefulness We should, therefore, welcome this opportunity of recreating and enforcing the national will to stand on our own feet and make repid strides towards a socialist pattern of society

While mobilizing planned efforts for accelerating our economic growth, we have to constantly bear in mind that material affluence alone cannot make a nation really great and glorious Along with the removal of poverty and unemployment by comprehensive schemes of economic development we must take urgent steps to raise the ethical and spiritual standards of the people, more especially of the younger generation Just as a man does not live by bread alone, so a nation cannot attain ditinction only on the strength of material prosperity That is why our ancient *Rishis* had proclaimed in categorical terms that wealth alone could never satisfy human beings—न वित्तेन तर्पणीयो मनुष्य. Several highly developed and industrialised countries of the West are witnessing the curious spectacle of 'the tragedy of mere affluence' They now envisage a new pattern of society in which there would be a better balance between wealth and wisdom, science and spirituality It is in this sphere that our Indian Universities could play an important part by evolving more rational and integrated norms of public behaviour for the guidance of youngmen and women entrusted to their care It is, indeed, the basic function of a University to train up new leaders in different spheres of national life who would be equipped not only with modern science and technology, but would also possess unimpeachable character and a sense of ardent patriotism A nation cannot become really great merely through the accumulation of wealth or by the erection of large factories and lofty buildings She could command genuine respect in the comity of nations only if her citizens are imbued with the noblest traditions of unity, hard work, integrity and broad outlook

XLVI

I have always been an optimist. I have a living faith in the bright destiny of India. I am convinced that, despite our numerous difficulties and short-comings, we shall be able to register spectacular progress in different sectors of national life in the coming years. Our young citizens studying in different Universities must be the harbingers of a new era in which there would be peace, equality and justice and an atmosphere of constructive work in place of violent and fruitless agitations. Instead of looking at the shortcomings of others, let us glance at our own faults and make earnest efforts to liquidate them with humility, and a strong will. It is, surely, our good fortune that we were born in India. 'दुर्लभं भारते जन्म' sang the ancient Rishis who inspired generations after generations with lofty ideals and goals. India has been a great country in the past, she is bound to achieve greatness in the present, and she is destined to scale greater heights in future. We have only to revivify our own faith and self-confidence and march with steady steps on the glorious path shown by our distinguished leaders like Gandhi and Tagore, Nehru and Vinoba.

True patriotism does not imply cultural isolation or exclusiveness. We should ever be receptive to new ideas from all directions and try to imbibe the good qualities of other nations. Even so, our feet must be firm on our own soil. A nation which cuts itself adrift from her cultural heritage and only endeavours to leass from others cannot achieve the right synthesis between the ancient and modern values of life. That is why Gandhiji had observed : "My *Swaraj* is to keep intact the genius of our civilization. I want to write many new things, but they must all be written on the Indian slate." Gurudev Tagore had compared the culture of a nation to a big river into which many smaller rivers flow within the banks. But the joining rivers should never be allowed to precipitate a flood and cause disaster in the surrounding areas. A stately tree projects itself into the sky and gets fresh breeze from different sides. But its real strength lies in its deep roots within the 'good earth'. If the roots are weak and superficial, the tall tree would tumble down in the midst of even a gentle storm. So, each nation must value her own cultural traditions and be steeped into them. At the same time, she should always be prepared to receive new knowledge from all quarters without mental reservations. It is in this sense that real internationalism is based on sound nationalism. As Gandhiji had remarked: "Indian nationalism wants to find full self-expression for the benefit and service

of humanity at large. . . My patriotism is not an exclusive thing; it is all-embracing".

Let me conclude by quoting the inspiring words of Max Muller from his famous book '*India : what can it teach us. ?*'

> "If I were to look over the whole world to find out the country most richly endowed with all the wealth, power and beauty that nature can bestow, in some parts a very paradise on earth, I should point to India. If I were asked under what sky the human mind has most fully developed some of its choicest gifts, has most deeply pondered on the greatest problems of life and has found solutions of some of them which well deserve the attention even of those who have studied Plato and Kant, I should again point to India !"

Let us be worthy sons of this great and glorious Motherland who is destined to show a more rational and humane Order to the strife-torn and restless humanity. Jai Hind.

APPENDIX 'K'

विश्वविद्यालय की १९६८ की परीक्षा में स्वर्णपदक प्राप्त करने वाले विद्यार्थियों की सूची

संकाय	विषय	नाम	शिक्षण संस्था
१. विज्ञान अधिस्नातक (कृषि)	मृदा विज्ञान	जैन नमोकर	राजस्थान कॉलेज आफ एग्रीकलचर, उदयपुर
२. विज्ञान अधिस्नातक (कृषि)	वनस्पति रोग विज्ञान	सेठरमणिकलाल दुलेराय	एस०के०एन० कॉलेज आफ एग्रीकलचर, जोवनेर
३. विज्ञान अधिस्नातक (कृषि)	मृदा एवं जल संचारण	नरसिंह दान	एस०के०एन० कॉलेज आफ एग्रीकलचर, जोवनेर
४. विज्ञान अधिस्नातक (कृषि)	उद्यान विज्ञान	शफाग्रत मोहम्मद	राजस्थान कॉलेज आफ एग्रीकलचर, उदयपुर
५. विज्ञान अधिस्नातक (कृषि)	कीट विज्ञान	भटनागर विनोद सहाय	एस०के०एन० कॉलेज आफ एग्रीकलचर, जोवनेर
६. विज्ञान अधिस्नातक (कृषि)	दुग्धशाला विज्ञान	कछवाहा सीताराम	राजस्थान कॉलेज आफ एग्रीकलचर, उदयपुर
७. पशुचिकित्सा विज्ञान अधिस्नातक	पशुपालन पशुपोषण	पुरोहित गणपत राज	कॉलेज आफ वैटरीनरी एण्ड एनीमल साइन्स, बीकानेर
८. पशुचिकित्सा विज्ञान अधिस्नातक	प्रसूति विद्या एवं मादा रोग विज्ञान	माथुर भुवनेश्वर शंकर	कॉलेज आफ वैटरीनरी एण्ड एनीमल साइन्स, बीकानेर
९. कला अधिस्नातक	संस्कृत	बिहारीलाल जैन	महाराणा भूपाल कॉलेज, उदयपुर

APPENDIX 'K' *(Continued)*

संकाय	विषय	नाम	शिक्षण संस्था
१०. कला अधिस्नातक	दर्शन शास्त्र	कु० मीना पारीक	महाराणा भूपाल कॉलिज, उदयपुर
११. कला अधिस्नातक	हिन्दी	कु० चन्द्र प्रभा श्रीवास्तव	महाराणा भूपाल कॉलिज, उदयपर
१२. कला अधिस्नातक	अर्थशास्त्र	सामालाल जैन	महाराणा भूपाल कॉलिज, उदयपुर
१३. कला अधिस्नातक	इतिहास	कु० रेखा दशोत्तर	महाराणा भूपाल कॉलिज, उदयपुर
१४. कला अधिस्नातक	सामाजिक कार्य	एब्राहाम मेत्युस	स्कूल आफ सोशियल वर्क, उदयपुर
१५. कला अधिस्नातक	समाज शास्त्र	जवाहरलाल काटेड	महाराणा भूपाल कॉलिज, उदयपुर
१६. कला अधिस्नातक	राजनीति विज्ञान	छीतरमल रांका	महाराणा भूपाल कॉलिज, उदयपुर
१७. कला अधिस्नातक	चित्रकला	कु० रेखा माथुर	"
१८ [illegible]	ग्राम्य समाजशास्त्र	जयदेव यशवत मराटे	विद्याभवन रुरल इन्सटीट्यूट, उदयपुर
१९ [illegible]	भूगोल	हरिराम मीना	महाराणा भूपाल कॉलिज, उदयपुर
[illegible]	गणित	नवीन कुमार पाठक	"
[illegible]	भौतिक विज्ञान	बसन्तीलाल देवपुरा	"
[illegible]	[illegible] विज्ञान	अनिल अच्युत भालेकर	"
[illegible]	[illegible] विज्ञान	कु० गुरमति कौर	"
[illegible]	[illegible] विज्ञान	कु० तुर्का निर्मला मेरी	"

APPENDIX 'K' *(Continued)*

संकाय	विषय	नाम	शिक्षण संस्था
२५. शिक्षा अधिस्नातक		पन्नालाल वर्मा	विद्याभवन गोविन्दराम सेक्सरिया टीचर्स ट्रेनिंग कालेज, उदयपुर
२६. विज्ञान स्नातक (कृषि)		माहेश्वरी प्रेमनारायण	एस०के०एन० कॉलेज आफ एग्रीकलचर, जोबनेर
२७. पशु चिकित्सा तथा पशुपालन स्नातक		शर्मा लीलाकर	कॉलेज आफ वेटेरीनरी एण्ड एनीमल साइन्स, बीकानेर
२८. कला स्नातक		कु० मंजुला व्यास	मीरांगर्ल्स कॉलेज, उदयपुर
२९. विज्ञान स्नातक		मनोहरलाल कालरा	महाराणा भूपाल कॉलेज, उदयपुर
३०. वाणिज्य स्नातक		रोशनलाल खेतपाल्या	,,
३१. विधि स्नातक		राजेन्द्र प्रसाद बया	डिपार्टमेंट आफ लॉ, उदयपुर
३२. शिक्षा स्नातक		यमुना शंकर दशोरा	विद्याभवन गोविन्दराम सेक्सरिया टीचर्स ट्रेनिंग कॉलेज, उदयपुर
३३. विज्ञान स्नातक (गृह विज्ञान)		कु० निर्मला मोहता	राजस्थान महिला विद्यालय, उदयपुर
३४. विज्ञान अधिस्नातक (कृषि)	सरल विज्ञान	लक्ष्मीलाल धाकड़	राजस्थान कॉलेज आफ एग्रीकलचर, उदयपुर

APPENDIX 'L'

University merit scholarships were awarded to the Following for standing First in order of Merit at the Examinations Held in March/April/May, 1969

Name of the student with College	Roll No	Examination	Merit Position	Amount of Scholarship	Tenable for	Remarks
1 (Mrs) Satyawati Singh, Meera Girls College, Udaipur	190	Pre-University (Arts)	I	30/-	12 months	
2 Kamal Kumar Govil, M P College, Udaipur	20	Pre-University (Sci)	I	30/-	—do—	
ana Lal Mehta, M B College, pur	44	Pre-University (Com)	I	30/-	—do—	
alpana Sethi, Meera lege, Udaipur	615	Ist Year TDC (Arts)	I	30/-	—do—	
ethw, M V Shramjeevi e, Udaipur	261	Ist Year TDC (Arts)	II	30/	—do—	
ra Bhanawat, M B e, Udaipur	208	Ist Year TDC (Sci)	I	30/-	—do—	

APPENDIX 'L' *(Continued)*

Name of the student with College	Roll No.	Examination	Mreit Position	Amount of Scholarship	Tenable for	Remarks
7. Shri Paul Suthar, M.B. College, Udaipur.	82	Ist Yera TDC (Com.)	I	30/-	12 months	
8. Bhanwar Singh Chauhan, M.B. College, Udaipur.	12	IInd Year TDC (Arts)	I	30/-	—do—	
9. Bhagwat Ram Mainawat, M.B. College, Udaipur.	10	IInd Year TDC (Arts)	II	15/-	—do—	
10. Subhash Chandra Soni, M.B. College, Udaipur.	136	IInd Year TDC (Sci.)	I	30/-	—do—	
11. Subhash Chand Jain, M.B. College, Udaipur.	271	IInd Year TDC (Com.)	I	30/-	—do—	
12. (Miss) Renu Sharma Meera Girls College, Udaipur.	297	Final Year TDC (Arts)	I	50/-	—do—	
13. Roshan Lal Vyas, M.B. College, Udaipur.	63	Final Year TDC (Sci.)	I	50/-	—do—	

APPENDIX 'L' *(Continued)*

	Name of the student with College	Roll No	Examination	Merit Position	Amount of Scholarship	Tenable for	Remarks
14	*Padam Lal Sarawagi*, M B College, Udaipur	41	Final Year TDC (Com)	I	50/-	12 months	
15	Manohar Lal Kalra, M B College, Udaipur	10	M Sc (Prev) Physics	I	50/-	—do—	
16	Roshan Lal Khetpalia, M B College, Udaipur	15	M Com (Prev)	I	50/-	—do—	
17	Badan Singh Rathore, Vidya Bhawan Govindram Sekasria Teachers' College, Udaipur	15	B Ed	I	50/-	—do—	
18	Bhanwar Lal Jain Department of Law, University of Udaipur	8	LL B Ist Year of Three Year Courss	I	50/-	—do—	
19	Sohan Lal Pipara, Department w, University of Udaipur	45	LL B IInd Year of Three	I	50/-	—do—	
	ishpa Nakhre, M B Jdaipur	6	M A (Prev) Sanskrit (Semester Scheme)	I	50/-	—do—	

n addition to the above shholarships one stipend of the value of Rs 100/- P M tenable for ten months was awarded *to Shri Goverdhan Singh Surana, who passed* the LL B Examination held in 1969 from this University and who was admitted to the LL M Course in Rajasthan University

APPENDIX 'L' *(Continued)*

S. No,	Name of the student with College	Examination	Merit Position	Amount of Scholarship	Tenable for
Agricultural wing					
1.	Gaya Prasad Pathak (Rajasthan College of Agriculture, Udaipur.)	B.Sc. (Ag.)	Tenth	Rs. 100/-	2 Years
2.	Reniwal Ridh Karan (S.K.N. College of Agriculture, Jobner.)	B.Sc. (Ag.)	Seventh	Rs. 100/-	2 Years
3.	Mishra Ashok Kumar (College of Veterinary Animal Sc., Bikaner.)	B.V.Sc. & A.H.	First	Rs. 100/-	2 Years
4.	Rathu Indra Dan (S.K.N. College of Agriculture, Jobner.)	Pre-Professional II	First	Rs. 30/-	1 Year
5.	Pudasaini Som Prasad (Raj. College of Agri., Udaipur.)	B.Sc. (Ag.) I	First	Rs. 30/-	1 Year
6.	Jat Ram Lal (S.K.N. College of Agriculture, Jobner.)	B.Sc. (Ag.) II	First	Rs. 30/-	1 Year

APPENDIX 'L' *(Continued)*

S No	Name of the student with College	Examination	Merit Position	Amount of Scholarship	Tenable for
7	Mehta Chandra Singh (College of Tech & Agril Engg, Udaipur)	B E (Ag) I	First	Rs 30/-	1 Year
8	Shrestha Ramesh Bahadur (College of Tech & Agril Engg, Udaipur)	B E (Ag) II	First	Rs 30/-	1 Year
9	Bhurat, R K (College of Tech & Agril Engg, Udaipur)	B E (Ag) III	First	Rs 30/-	1 Year
10	Parihar, J S (College of Technology & Agril Engg, Udaipur)	B E (Ag) IV	First	Rs 30/-	1 Year
11.	Gulam Mohayuddin (College of Technology & Agril Engg, Udaipur)	B V Sc & A H I	First	Rs 30/-	1 Year
12	Pathak Vinod Kumar (College of Veterinary & Ani Sci, Bikaner)	B V Sc & A H II	First	Rs 30/-	1 Year
13	Abrel Ram Krishna (College of Veterinary & Ani Science, Bikaner)	B V Sc & A H III	First	Rs 30/-	1 Year

APPENDIX 'L' *(Continued)*

S. No.	Name of the student with College	Examination	Merit Position	Amount of Scholarship	Tenable for
14.	(Miss) Sunita Srivastava (College of Home Science, Udaipur.)	B.Sc. (Home Sc.) I Year	First	Rs. 30/-	1 Year
15.	(Miss) Agrawal Maya (College of Home Science, Udaipur.)	B.Sc. (Home Sc.) II Year	First	Rs. 30/-	1 Year
16.	(Miss) Sangeneria Indu Bala (College of Home Science, Udaipur.)	B.Sc. (Home Sc.) III Year	First	Rs. 50/-	2 Years